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The Journal of the Australian Branches of the British Medical Association.

VOL. I.—3RD YEAR—NO. 3. SYDNEY: SATURDAY, JANUARY 15, 1916. PRICE 6D.

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THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—3RD YEAR. SYDNEY: JANUARY 15, 1916. No. 3.

THE WORK OF A REGIMENTAL MEDICAL OFFICER IN THE ROYAL ARMY MEDICAL CORPS.

By **Archie L. McLean, M.B. (Sydney),**
Lieutenant, R.A.M.C.

Occasionally at the front I have had opportunities of reading *The Medical Journal of Australia*, and it occurred to me that its readers might be interested to know something of the work of a regimental medical officer attached to a battalion of the British Expeditionary Forces in France.

I have had the honour of looking after more than a thousand men of the 8th Black Watch for the past eleven months, six months of which were spent in training at home and five months on active service. At peace and at war they were a magnificent body of men, recruited from the mining districts of Perthshire, Forfarshire and Fifeshire, with a heterogeneous collection of labourers, farmers, shepherds, tradesmen, factory hands, clerks and whatnot.

For most of the winter (1914-15) the battalion lived in barracks at Aldershot, undergoing the strenuous training which hardened and moulded them into regulars. The winter was the wettest and most depressing in the meteorological history of England, the barrack life was grim, grey and monotonous, though there were continually rumours from the front and of attacks on the east coast; the food was good and wholesome, if unvarying from day to day. A few days' leave and the Scottish New Year were the bright spots in this otherwise long gamut of parade, route march, musketry exercise, lecture and tactical scheme.

The M.O. has, on the whole, a "soft job." He attends to the needs of the morning "sick," takes his turn as orderly medical officer at the local hospital, trains his sergeant and sixteen stretcher bearers in "first-aid" and R.A.M.C. drill; lectures his eight "sanitary men" on the principles and practice of public health applied to the army, and overhauls his Maltese cart for the carriage of the field paniers, as well as two water carts which are left to the responsibility of himself, an N.C.O. and four men. Of course there are set hours for work, and at the end of a few months the regimental M.O. finds that he has plenty of leisure for riding, recreation and the social life of his battalion.

The more common complaints of the morning sick were obscure strains and sprains of the feet, rheumatism in its diverse manifestations, abscesses and subacute inflammations, coryza, bronchitis, tonsillitis and aching carious teeth. There were many cases of varicose veins of the legs, varicocele, flat feet, bunion and hammertoe, and, as the weeks went by and the route marches grew longer, and the packs became heavier, the worst cases were singled out and discharged. It is a notable fact that abnormalities of this kind did not prevent hundreds of the men composing Kitchener's first army from going to the front and earning distinction in the "great push" of September 25, 1915. Miners composed almost 40% of the battalion, and rheumatism was their constant and sometimes serious complaint. Many good workers became crippled in the wet, cold weather, and were "lost" in hospital. Miner's amblyopia was a source of great annoyance to the musketry instructors, and weeks of patient coaching had to be spent in teaching men how to aim and shoot. The same men had possibly been returned from a regimental M.O. or an ophthalmic specialist, as "eyesight normal," or "malingerer." Several soldiers died of pneumonia, mainly because they chose to "stick it" after a severe wetting, until it was too late for treatment to save them. The teeth of the battalion, and the same applied to each battalion of the brigade, were so bad that a dentist could have immediately set to work and continued extracting and filling teeth, and fitting artificial dentures for six months, with no immediate prospect of completing his work. Sometimes it appeared as if a dental officer, not a medical officer, would have been the regimental acquisition. As it was the medical officer speedily became an amateur dentist, with alternating periods of success and failure. Right throughout the whole period of training there were men being fitted with artificial dentures, and even in the trenches teeth had to be treated, stopped or extracted.

During the first few weeks of active service the battalion was mostly engaged in making a kind of grand tour of the British line. Long marches, bivouacs in the open country, billetings in villages and towns, and trench-digging behind the firing line kept the men in a continual state of unrest, and, before a month had elapsed several had to be sent down the line with cardiac trouble, varicose veins, and old injuries of the foot or leg. Venereal disease was very rare.

The medical officer was equipped with a water-tester, and in every locality it was for him to say whether the water supply was potable or otherwise. His first duty on arriving in new billets was to visit all the neighbouring private or public pumps, to test the water. In many cases it had been "passed" by local British sanitary authorities. He had to arrange with the non-commissioned officer in charge of the water carts, the most convenient method of supplying the companies, which were often billeted a long distance from one another.

Another duty was to ride round as quickly as possible and to ascertain the general sanitary condition of the billets, and, if necessary, to condemn certain houses or barns as unfit for habitation. It was not often that the latter course had to be taken, because the billets had in almost every case been previously occupied, and the sanitation of the British Expeditionary Force in France has been a triumph of organization, and discipline, and scientific practice.

The last duty of the medical officer was to secure a medical inspection room in which to see his daily "sick," who always tended to increase in numbers the longer a battalion remained in one place. There were men with skinned and blistered heels, "chronics" with a fresh "touch" of rheumatism, or old soldiers with some magnified complaint—a "dose of cold," a recurrent ague of India or South Africa, a suspicion of scabies or impetigo. Some of the men were youngsters of 17, and some of the "young" soldiers were old fellows of 50. In whatever category, they were all eager, these Scotch Jocks, to be, somehow, at the front, somewhere! Sick men, unable to proceed with the battalion, were sent away to the nearest ambulance, and from it evacuated to a casualty clearing station.

Already much has been written of life in the trenches, and one of the first impressions to be gleaned from the various accounts is the artificiality of the conditions. Robust fellows, who revelled in the free air, and to whom hard work in the open was a pleasure and a natural thing, have suddenly to inure themselves to groping among intricate half-underground tracks, speedily converted into mire by a shower of rain, to living in confined dug-outs for days with insufficient exercise, their nerves keyed up for hours by the flight of shells, bombs, and bullets, and, in most cases, with an overplus of food, which is the unvarying service ration. These same fellows would repudiate the suggestion that they possessed nerves, and to see men sleep, worn-out and sodden with water, in the most grotesque attitudes in any stray niche or sump-hole would make one inclined to think that the Jack or Tommy cared not a jot! But see him when his eight or more days' routine is over, and the relief in his face and the good news in his letters home gives a lie to the hasty theory that trench life is not a period of high tension!

In our case, where such a large proportion of the battalion were miners, digging, burrowing, and "roughing it" within these intricate passages of earth was not a great hardship to such of the men who had spent years underground, in wet workings, under circumstances which had either hardened or sapped their constitution. The Perthshire miner is an excellent soldier for trench warfare!

The psychology of it all keps one interested in spite of the grinding hardship and the touch of drudgery. Officers feel the strain much more than the men, necessarily, because their responsibility is greater, and because their sensorium is a more delicate and responsive entity. Very often the most efficient officer is exquisitely acute in intelligence and in feeling, but adamant in the element of conscious will. The saving "elements" which give drudgery a piquancy, and tint the long, drab days of monotony are good humour and contentment; and of these there is always enough to keep alive and happy a whole battalion.

We have often seen the Jocks in the fire-trenches take cover when a big shell has signalled its coming, and, after the explosion, rush out like a pack of schoolboys to secure the hot fragments as souvenirs; then, to scuttle back as quickly into dug-outs when the next messenger is on the way. Death and agony in all their awful realism are strangely mingled with life and laughter, gay and light-hearted in this, the most premeditated and inhuman of all forms of warfare—trench-fighting!

There is an indisposition commonly and indefinitely known as "trench fever," and the term covers a multitude of complaints such as paratyhpoid, hepatic derangement, subacute colitis, food poisoning, constipation, and toxæmias of unknown cause.

In one situation, near Festubert, cases simulating typhoid fever in prodromal symptoms were very common. There the battalion remained for more than a month during the hot summer weather. The trenches ran through the site of a battlefield, where a bloody engagement had been fought. Hundreds of decaying corpses lay between the opposing trenches and between the three British lines, fire-trenches, supports and reserves. The stench from these bodies, and the fact that many of them had been buried in the parapets and parados made the locality a very unhealthy one. Fatigue parties were engaged at night in burying, and quick-lime and chlorinated lime were found to be the best disinfectant and deodorizers.

It was during the period at Festubert, and for some weeks after leaving the place that many cases of pyrexia of unknown cause and paratyphoid, diagnosed as such by bacteriologists at the casualty clearing stations, occurred. It is instructive to note that every man in the division received two injections of anti-typhoid serum, so that the majority of the pyrexia attacks, none of which lasted more than a week, were presumably the reaction to a true typhoid infection.

It is an undoubted fact that of all the cases of intestinal derangement which were treated or sent down to ambulances, the greater number were due to a combination of causes—the more or less stationary life of the trenches; the generous ration—which was reduced later in several items, including meat; the exalted state of mental excitement (mainly suppressed), and to a visitor not apparent; and the water, which in many parts of the line was obtained from shallow wells, sunk in the trenches, or from the battalion's water-cart, in which, if the water contained much organic matter, it was often "over-treated" with chlorinated lime, very irritating to an overtaxed digestive system.

The organization of the medical service on the Western front has been well-nigh perfect for many months, and it may be truly said that, except in the case of a mighty attack or defence, with many thousands of casualties, the wounded are handled dexterously and quickly through every unit in the long journey from the front to the base. In a great battle, comparable to that which took place on September 25, near Loos and Vermelles, the main difficulty in dealing with wounded is to transport them from the battlefield and trenches to the dressing and base stations of the field ambulances. Once they are away from the zone of bullet and shell fire their needs can be attended to with some adequacy, while the casualty clearing stations to which the

field ambulances deliver their patients will never be "choked" for more than 24 hours.

After the battle of Loos, men lay out on the wide chalk plains, swept by a terrific fire, for as long as four days, before succour reached them, and there were hundreds of wounded in dug-outs and trenches who were never found. During the actual attack the 16 stretcher-bearers allotted to each battalion, could do very little, since the majority were speedily killed or wounded.

All wounded who could crawl, hobble, or walk were fortunate if they were not more than half a mile from their own trenches, but when a man was badly hit away out in the enemy's country his chances of ultimate safety were small if he were unassisted.

Our brigade took the Hohenzollern Redoubt and Fort No. 8, losing in the advance nearly 2500 men, who were scattered over an awful wilderness of trench-furrowed ground, slag heaps, quarries and shell-smitten villages. For four days they were brought in, by night and day, on every possible occasion, but scores of them fell into the enemy's hands in the first counter-attack, and the rest, who were unrescued, went to swell the great army of the "missing."

A regimental medical officer in a modern battle can do little more than render first-aid, bandaging wounds, allaying hæmorrhage, and giving morphine to those in pain. With a few helpers, he may be able to establish dêpots of wounded men, in trenches and dug-outs, which are easily accessible, and unexposed to fire. The 'walking wounded" may be treated and passed on to the nearest ambulance dressing station, but the great majority of those with abdominal or thoracic wounds, or compound fracture of the head or leg, must remain untended often until nightfall, and take the chance of being found by a bearer party.

The above account may serve to emphasize a few aspects of the work of the regimental medical officer, and to indicate the wide scope of personal interest which the care of a regiment may afford him.

MEDICAL NOTES IN THE WEST INDIES.

By **H. J. Brennand, B.A., M.D., M.S. (Syd.),**
Staff Surgeon, H.M.A.S. Melbourne.

After a sojourn of many months on the West Indian Station, during which time the writer had very favourable opportunities of observing the life of the people in many of the islands, it occurred to him that if some notes and observations were set down on paper, the results might be interesting to some of the members of the medical profession in Australia.

Arriving from Gibraltar, viâ Bermuda, at St. Lucia, on Boxing Day, 1914, the ensuing nine months were spent, with a short interval in the North Atlantic, in and around practically all the West Indian Islands and the coasts of Venezuela, Colombia and other countries of the Spanish Main. The climates experienced varied from the tropical mid-winter to late autumn, so that the climatic conditions of practically a whole year were under observation.

With the sole exception of the northern part of the Bahamas, the whole of the West Indies lie within the northern tropics, and, consequently, the climate is hot, moist and more or less trying to Europeans till they have become acclimatized. The Leeward Islands, including St. Thomas, The Virgins, Antigua, Barbuda, St. Kitts and Montserrat, lie to the north-east, and are cooled by the north-east trade winds, which blow across the wide Atlantic, and the same applies to the Windward Islands, of Martinique, St. Lucia and St. Vincent, and the Grenadines. Barbados lies further to the east, and enjoys probably the healthiest climate in the West Indies. Trinidad, 200 miles further to the south, is very humid and hot and has very little variation between the summer and the winter climate. With the exception of Antigua and Barbuda, all the Antilles are mountainous, and the towns are situated on the leeward side of the islands, so that, as a rule, they are shut off from the cooling influence of the trade winds. Some of these mountain ranges rise to a considerable height, and in Dominica, Martinique, St. Lucia and Trinidad, rise to several thousand feet, and the climate at the higher levels is much cooler and healthier. Jamaica, probably the finest island of all, has several upland towns on the Blue Mountain Ranges, which are much frequented by the dwellers on the coast as sanatoria, particularly Mandeville (2,600 feet) and Newcastle (4,000 feet). The low, alluvial plans of Demerara and the Guianas are intensely hot, and here, and in the neighbouring coasts of Venezuela, Colombia and Panama, and of Yucatan and Honduras, malaria and other tropical diseases are rife.

In Colombia, the coastal strip is hot and unhealthy, and the cities of Cartagena and Baranquilla swelter in the heat all the year round. Cuba in winter enjoys a delightful climate, but in summer is extremely hot, especially along the coast, while the neighbouring shores of Yucatan and Honduras are almost unbearable in mid-summer, not so much from the heat as from the humidity of the atmosphere, which makes a temperature of 84° Fah. most oppressive. These coasts, in former times, were the foci from which the dreaded "Yellow Jack" spread, and it is more or less endemic there still. The Canal Zone at Panama is a striking example of what can be done in these countries if a strong authority takes them in hand and enforces sanitary rules strictly.

Conditions of Medical Practice.

Most of the British West Indies are grouped into several governments. Jamaica, The Leeward Islands, The Windward Islands, Barbados, and Trinidad are all separate, and, with the sole exception of Barbados, are Crown Colonies. In each case the regulations for admission to medical practice are similar. To be registered the applicant must hold a British degree or diploma, and persons coming from the United States and certain Canadian schools, must pass an examination set by the Medical Board of the island. The fee for registration averages about £5. Each island is divided into districts, to each of which a medical officer is appointed. The district medical officers are under the supervision of the Government Medical Officer. These appointments,

as a rule, are made by the local Government, subject to the approval of the Colonial Office. The salary is small, and varies from £100 to £200, according to the size and population of the district. These officers each have a local hospital, at which the negro peasantry are attended free of charge if they are poor, which is usually the case. Private practice is, of course, allowed, but the average income of the medical men probably does not exceed £500 per annum. This is counter-balanced by the extremely low cost of living, and is probably equal to twice as much in Australia. Servants, for instance, are paid from three to five shillings per week, and vegetables, fish and other food are ridiculously cheap. Ford, and other American cars, are very moderate in price, and an excellent five-seater car can be landed, complete, in Jamaica for £140. The same as would probably cost £250 in Australia. The majority of the doctors in the West Indies hail from Edinburgh and the various London schools, but a good many of the younger men come from McGill University, in Canada. In Jamaica, there is an increasing number of coloured medical men, trained usually in British schools, and they are said to be capable at their work, but not at all scrupulous in their observance of the rules and conventions of medical etiquette. They suffer also to a certain extent by reason of their colour, and their practice is confined exclusively to their own race. Some of the islands are stricter on this point than others. In the capital cities of Kingston in Jamaica, Bridgetown in Barbados, and Port of Spain in Trinidad, there are large central hospitals, with from 250 to 300 beds, with resident staffs and a number of visiting surgeons and physicians, who receive an annual salary, usually about £100. The hospital at Trinidad is really a fine building, and that at Barbados has a new block of buildings, with a splendid operating theatre, ready for occupation. The Jamaica hospital is old, and was one of the few buildings of any size in Kingston that resisted the fearful earthquake of 1907, which, in some respects, was probably a pity. In Antigua, St. Lucia, and some other islands, the central hospitals are more like Australian cottage hospitals. The nursing staffs are presided over by European matrons, usually from one of the large English training schools, and are practically all coloured. The nurses undergo the same course of training practically as in English or Australian hospitals for three years, with a further course of instruction in midwifery, and are regarded as being excellent and capable nurses. In some of the islands, notably St. Lucia and Dominica, the negroes speak a French *patois*, and it is only locally trained nurses that can understand this, it being neither French nor English, but a *patois* peculiar to these islands. After completing their training, the nurses either go as matrons to the smaller district hospitals, or carry on private nursing. There is practically no field for European trained nurses, as the fees paid are too small for a European lady to live on.

The Negro as a Patient.

All who have had to do with the West Indian negroes agree that in most respects they are just like children in their ways. To obtain a correct clinical history from these people is an impossibility. They will say just anything to please (?) the doctor, and contradict themselves constantly, not from untruthfulness, but simply from inability to fix their ideas. The majority do not know their age, but reckon from some past event in the history of their island, such as "the great storm," "the cholera," "the great flight of birds," or "the Martinique eruption," and from this the questioner reckons up their age.

They are patient and docile as a rule, but have a disinclination, as is the case everywhere, to lose their senses under an anæsthetic. They are careless and dirty in many cases, and old men, with senile gangrene or skin diseases, will not seek advice very often till the disease is well advanced. The richer ones will try to evade payment sometimes, and it is amusing to see them offer half a dollar for the fee, but, on being refused the prescription, promptly find the other half dollar in the recesses of their clothing, grinning and chuckling with glee at being found out in the attempt to get off at half price. Many of them, like club patients in other countries, are inveterate medicine swallowers, but prefer mixtures "that have a bite in them" to colourless or almost tasteless ones. Those who can afford it buy endless numbers of patent pills and potions. They are a happy, good tempered, careless lot of people, but are reasonably brave when surgical pain has to be endured, although many of them, owing to their poverty and the vegetarian nature of their diet, have not got much stamina.

Quarantine Regulations.

Quarantine regulations, as might be expected in islands so close to the Central and South American mainlands, are strictly enforced, with the result that small-pox, yellow fever, and other diseases have not appeared in Jamaica and the other islands for several years. In Barbados, some years ago, small-pox appeared, and great opposition to vaccination was set up by the negroes. One medical genius, however, solved the difficulty by getting the Government to pay the head of a family a shilling for each child vaccinated. This was too strong a temptation for *pater familias*, with the result that the children, usually six to eight per family, were brought along, and soon after father and mother appeared in a new coat and a new gaily coloured print dress. In the larger ports of Kingston, Port of Spain and Barbados, the port health officer combines the duties of quarantine and immigration officer, and is not allowed private practice, but in the smaller islands, where there is less shipping to attend to, he is allowed it. All the quarantine officers met with on our cruises were Europeans, but some of the port health officers at the towns of Spanish America were indeed curiosities. At one port there, the health officer and the proprietor of the only hotel (or rather "pub.") arrange between themselves to delay the landing of the passengers till the one daily train to the capital has started. The exasperated travellers, when they do land, find themselves obliged to stay at this rather unsavoury *albergo* till next

day. This is a good example of co-operation, which might be imitated elsewhere, perhaps.

Notes on Special Diseases in the West Indies.

The birth-rate among the negroes is very high, but the infant mortality is enormous, owing mainly to dietetic mistakes. Children of a few months are fed on yams, sweet potatoes, bananas and boiled maize, with, of course, disastrous results. Still, the majority of women suckle their babies for a time at least. The negroes live in small wooden houses, usually eight to ten individuals in a room 10 feet by 10 feet, and they shut all doors and windows, and every chink that might admit the fresh air, and there they sleep through the hot, tropical nights in an atmosphere that can scarcely be imagined. Doctors called to these cabins in the night to attend a case of sickness, order all hands outside, and wait a quarter of an hour to let the air into the shack before they enter it, mindful of the old saying current about the nigger:—

"De Lawd He lub the nigger well;
De Lawd He know him by de smell."

The housing of such numbers in these small shanties is a problem, girls and boys of all ages lie about on the floor, and there is apparently no attempt made at a separation of the sexes. The illegitimacy rate varies from 68% to 70% in Jamaica and Trinidad, but this does not necessarily imply universal laxity of morals in the European sense. Couples live together for many years faithful to each other, and rear families, and, later on, get married, and it is quite a common event in some of the islands for the girls to be their own mother's bridesmaids. Many couples have a trial run, and if no progeny ensues, separate and try elsewhere, and no harm is done, but, on the whole, the scale of morals is extremely low. In the case of the negroes, it should be stated that in sexual matters they are like the Japanese, not immoral, perhaps, but non-moral, or, as Artemus Ward expressed it, "Simple childring of nacher." At any rate, the negro race is rapidly increasing in numbers, and is not at all likely to die out in the West Indies.

Childbirth.—As a rule, labour is simple, and it is a common thing for a woman to work in the canefields till the last moment, be delivered in the field or in a neighbouring cottage, and to rejoin her companions an hour or two later. The usual complications do occur occasionally, and the medical men are called in to attend breech or transverse presentations, and very occasionally cases of dystocia, due to ill-shaped pelves; but these are not common. The women delivered under these *al fresco* conditions do very well, as a rule, despite the prevalence of tetanus in all the West Indian islands. In the hospitals, one frequently sees huge fibro-myomata of the uterus, carcinoma of uterus and breasts, and ovarian tumours and cysts. Some of these latter attain enormous dimensions. The specimens preserved in the hospital museums awaken admiration of the skill of the surgeons, who were able to remove these enormous tumours in practically every case with successful results. Gonorrhœa is simply rampant all over the West Indies, and the commonest operation on women is the removal of diseased ovaries and tubes, and in men, many of whom have had ten or a dozen attacks of gonorrhœa, the commonest operation performed at Kingston Hospital is Cock's perineal section for the immediate relief of impassable strictures. As many as three or four of these cases are done several times weekly. Enlarged prostates also are very common, and are successfully removed in the majority of cases, either by the perineal or the suprapubic route, the latter being preferred by most of the operators, so I understand.

Syphilis is the great scourge of the islands, and in Jamaica, Cuba, St. Lucia, Martinique and Trinidad, all large shipping ports, some method of dealing with this disease is urgently required. The return of many thousands of men from the works at Panama is responsible for the introduction of this disease in a malignant form sometimes into the remoter villages in the interior of the islands, where it had not previously been seen, although many cases of the related disease, yaws, occur there. In the British islands of Jamaica and St. Lucia, where garrisons of troops are quartered, the condition is a serious one, and some regulation in the nature of a C.D. Act is urgently required. During the stay of the ship at Jamaica, the naval medical officers were invited to sit at a Royal Commission, dealing with this matter, but it was regarded as being futile to make certain representations, owing to the foolishly smug, ostrich-like attitude of the British public towards this vitally important social sore.

In the out-patient departments of the hospitals syphilis is treated in a large number of cases. Salvarsan and neo-salvarsan were used extensively till the outbreak of war prevented supplies from being obtained. Kharsavan has not, so far, been employed to any extent, the local surgeons being rather impressed by the unfavourable reports on its use appearing recently in the medical journals.

Yaws is common in Jamaica, Trinidad, Martinique, St. Lucia and Guadeloupe, in the country districts, and several cases presenting the characteristic lesions were in the wards under treatment at the time of my visits. Successful and permanent results have been obtained by the use of salvarsan, which drug is universally employed for these cases. If it is not available, large doses of arsenic are given.

Leprosy is extremely common, and in Jamaica, Trinidad, Barbados, Antigua, Cuba and other islands, lazarettos are maintained. At Spanish Town, Jamaica, the institution contains several hundred inmates, and there is also a large building at Bridgetown, in Barbados. The practice of segregation is carried out strictly in some islands, but, at Jamaica, if the leper has sufficient means to live on, and can pay for necessary attention, he is allowed to remain in his home, but is not allowed to go outside certain limits. All the destitute lepers are sent to the lazaretto. From what I could gather, the tubercular form of the disease is commoner than the anæsthetic form, and I saw several extremely well marked cases at Antigua and elsewhere. Treatment is up-to-date, and the unfortunate people are made as comfortable as possible, residing usually in small huts inside the lazaretto enclosure. Hutchinson's

theory that the eating of imperfectly cured fish is the cause of leprosy is not held by the physicians, although in the towns great quantities of evil-smelling, dried stockfish are eaten by the people. In the country, the peasants are practically vegetarians, the only variation from a diet of bread, fruit, yams, bananas, mangoes, etc., being an occasional chicken and eggs. In certain parts of the islands leprosy appears to be endemic, and infection has been traced to certain houses. When this has been done, the establishment is consumed by fire.

Cancer is common, and statistics show practically the same incidence of the disease as in European countries. Some surgeons appear to think that the negro is very prone to malignant disease, but have no exact figures to base their opinions on. Carcinomata of the uterus, breast, and intestines appear to be the commonest, and, owing to the ignorance of the people and dread of operations, very many only come for treatment when the disease has spread extensively. Sarcomata are common among younger persons, as is the case elsewhere.

Tuberculosis in its pulmonary form it not very common in the country districts, but occurs frequently in the towns, where overcrowding in insanitary, stuffy, small houses is the rule. In all the hospitals that I visited, however, there were several cases of tuberculosis of the bones and joints, and this form of the disease is very common. The nature of the people's food, and their poverty and squalid dwellings, are, of course, active causes in the production of tuberculous conditions.

Malaria is common practically all over the West Indies, but, strange to say, it has never got a footing in Barbados. For some unexplained reason, the anopheles mosquito cannot live in this island, although it has undoubtedly been brought thither many times in steamers and inter-island schooners. Its relative, the *Stegomyia*, is plentiful there, but, owing to strict quarantine precautions, yellow fever has not been introduced into Barbados for many years. In the neighbouring islands of St. Lucia, Martinique, Dominica and Guadeloupe, malaria is very common, and, owing to the heavy rainfall and the innumerable pools and other places where mosquito larvæ can live and thrive, the attempts made to try and check this disease have hitherto failed. The Canadian garrison, stationed at St. Lucia, had suffered very severely, and at the time of our last visit, over 40% of the soldiers were down with malaria. The disease, except in the coastal districts of Demerara and the Spanish Main, is not of a very malignant type, and deaths from it are not common in the British West Indies.

Pellagra.—This very interesting disease is extremely common, and is increasing in some of the islands, notably Jamaica, Antigua, Martinique and Trinidad. Through the kindness of the medical men in the various islands, I was able to see over forty well marked cases. Dr. McDonald, of Antigua, is doing excellent work in connexion with this disease. The Simulium theory does not fit in with the case of the West Indies, as in Antigua and Jamaica energetic search has failed to find this insect. I understand that Dr. Sambon has abandoned the theory. The universal opinion of the medical men in the British West Indies is that it is a deprivation disease of some kind, allied to scurvy and rickets, and is due to the absence of some necessary ingredient from the food of the people, possibly fats and flesh foods. As remarked before, the diet of the peasants is restricted practically to carbohydrates and fruits. It may also be a dirt disease, contracted in some way through their insanitary dwellings and modes of life.

The lunatic asylums at Antigua, Jamaica and Martinique contain many pellagrous lunatics. The usual forms in which mental symptoms occur are melancholia, with occasional attacks of maniacal violence, proceeding rapidly to dementia. The prognosis is extremely bad, very few cases recovering. The mental symptoms occur usually some months or years after the appearance of the cutaneous lesions. Arsenic and mercury appear to be the most useful drugs, together with an improvement in the diet of the patients. In Antigua, many cases have been cured by this combined treatment during the earlier stages.

Ankylostomiasis.—This is the disease *par excellence* of the West Indies, and practically the whole of the coloured population suffers from it. At Kingston General Hospital, Jamaica, it is estimated that over 70% of all persons admitted there for all reasons are suffering from hook-worm disease, in addition to the complaint for which they are seeking treatment. Some cheery optimists among the doctors are looking forward to the time when, by the elimination of this disease, the West Indian negro shall have become an active, industrious, progressive individual, instead of what he is now in very many cases, lazy, unambitious, dishonest and dirty. This is perhaps only a dream, but the number of pale, anæmic, weak children and adults suffering from this disease is extraordinary. When a nigger is pale, it is perfectly obvious; instead of having a glistening, black skin, he has a sort of dull, smoky colour, which is easily recognizable. This disease, again, is due undoubtedly to the primitive methods of cooking and preparing food, to the universal practice of going about barefoot and the general dirt and squalor of their surroundings.

Elephantiasis or Barbados Leg.—This disease is fairly common in Martinique, Guadeloupe, Trinidad and on the Spanish Main. The medical men in Barbados think it is high time that its old name should be forgotten, as nowadays it is extremely rare to meet with cases of the disease in that island. At Martinique in *L'asile pour Indigènes*, there are several poor wretches suffering from this disease in an advanced stage.

Diseases of the eyes are not common. The islands are practically free from trachoma. A few cases of glaucoma occur, but not as a rule among the coloured population, and the incidence of cataract is said to be rather less than in European countries. Out of the many thousands of children that were seen during our stay on the West Indian Station, I

never saw a single case of strabismus, and their bright eyes and fine white teeth are the chief points noticeable in these children. There are practically no blind beggars anywhere, except a couple who haunt the streets of Trinidad, and both of these, by the way, are East Indian coolies.

Considering the number of women infected with the gonococcus, and the rough-and-ready midwifery of the coloured *femmes sages*, there are a surprisingly small number of cases of *ophthalmia neonatorum*, so I was informed.

Tetanus is extremely common all over the West Indies, and numerous deaths occur. The peasants all go barefoot, and small wounds of the feet are frequently followed by tetanus. Operation cases are prepared usually by painting the area with iodine, and this is found to act admirably as a disinfectant of the skin.

Ringworm and dhobie itch are a perfect curse in many of the islands. Practically half the ship's company have had this disgusting complaint at one time or another, after sending washing to be done ashore. Strange to say, clothes washed at the Chinese laundries do not seem to convey the disease. The Australian sailor, with his high rates of pay, prefers to send his washing out to doing it himself on board, but this will not occur again in the West Indies, at least, not on this particular ship. Strong, freshly-prepared tincture of iodine was found to be the best remedy for this affection.

Errors of refraction do not appear to be common, but the more prosperous young negroes, especially the young women, are often to be seen in the towns wearing gold (?) rimmed glasses, supplied in most cases by peripatetic "American optometrists" and "doctors of optics," who periodically descend in shoals on these devoted islands, returning to "Amurrika" after the northern winter has passed.

Insect bites are very common, and in many cases troublesome. Apart from the mosquito, Jamaica, and some of the other islands, have the Chigger flea, which attacks the children's bare feet. When the wounds are neglected, one or more toes are not infrequently lost.

In St. Lucia and Martinique, a small insect, called the *Bête rouge* infests the grassy fields, and it is advisable, when playing cricket or walking about, to wear leggings or other protection against this nuisance. Ticks are common in many places, where the undergrowth is thick and the swampy parts are in some islands alive with leeches.

Insanity.—The negro is prone to mental disease, very often due to syphilis, as elsewhere. Epileptics are fairly numerous in the various asylums. The negro is, practically speaking, a grown-up child, ignorant and extremely unstable in the presence of worries, financial or of any nature whatever. Negroes are very fond of religious revivals, and at such times become extremely excitable and erotic. In fact, the usual termination to a week of religious fervour is a sexual orgie. A number of the more unbalanced folks, usually women, become insane after these events. The district medical officers find a large increase in their midwifery work after the necessary nine months' interval has elapsed. Usually, there are two crops of "meeting babies" annually, one about March, and the other about November, so I understand.

A large proportion of the cases of melancholia and mania are the result of the toxins of pellagra, as remarked before, and in other cases alcoholism (usually from rum drinking) and heredity play a leading part. Cases of pellagral insanity, provided the general health can be improved, have a fairly good prognosis, but not otherwise.

To sum up briefly, the West Indian climates are, on the whole, suitable for Europeans, provided they can get occasional changes to the higher lands, away from the sea coast. Barbados and Jamaica have been continuously inhabited by English people for over two and a half centuries, and many descendants of the old families still live on the original estates, especially in Barbados. The white people look well, and the children also, but it is better for the latter to be educated in England, not so much on account of climate, but to break the accent in talking, which they have learnt from their negro nursemaids. The heat of mid-summer is very trying, but the practice of closing all offices and businesses at 4 p.m., which is universal, allows the people to take exercise at various sports in the cool of the evening, with undoubtedly beneficial results. As in other parts of the tropics, a good deal of alcohol, chiefly gin, whisky and rum, in the form of cocktails, is taken, but usually in very small quantities at a time. This apparently does little or no harm to anybody, possibly owing to the amount of perspiration which even a little exercise produces. Many of the Europeans live to ripe old age; the tombstones in many of the parish churchyards recording numerous persons dying between 80 and 90 years of age. The negroes, owing to their ignorance, laziness, poverty and dirty surroundings, and to their disregard of sexual morality, are prone to many tropical diseases, but, on the whole, seem healthy enough. The women are physically very fine, particularly in Martinique, where, owing to the colour line not having been rigidly drawn in past times, there is a strong French admixture. They carry great loads on their heads, walk many miles to and from the markets, and have a free and graceful carriage. In the seaports there is a crying need for some control of solicitation, even by very young girls, and here venereal disease is simply rampant, as might be expected under such circumstances.

In the larger islands, Boards of Public Health, with a staff of bacteriologists and sanitary inspectors, have been appointed, and are doing much extremely valuable work in preventive medicine. The islands are well supplied with medical men, and, although many of them have gone to the war, the majority, it is to be hoped, will return safely. Lodge practice is not very extensively carried on. The negroes, as a rule, are too poor to pay subscriptions, and the various Governments have made ample pro-

vision for the treatment of the sick poor in hospitals and for the aged and indigent in alms houses. For a visitor interested in the many forms of tropical disease, these islands offer an almost inexhaustable field for observation and research, and presently, no doubt, many valuable reports will be issued by the officers of the Rockefeller Institute, who are about to commence work in the various islands, devoting their attention at first, I understand, principally to the study of pellagra and malaria.

MALINGERING IN THE SERVICES.

By **William N. Horsfall, M.B., B.S. (Melb.),**
Newcastle, New South Wales.

After an extended period of service in the Navy, I have come to the conclusion that true malingering is very rarely met with. What is frequently termed malingering is, in my opinion, a mental condition partly brought on, or at least aggravated by injudicious handling. This curious mental state is well recognized in the service.

In all places where men live together in unnaturally confined surroundings, as, for instance, in a ship, there is always found a certain proportion who suffer at times from a definite mental condition—a moroseness—a "mouldiness"—a mental depression, which is not acute enough to be termed melancholia. In a ward-room, an officer, at other times a genial and interesting companion, may become so morose as to retire into himself, and be quite unable to shake off the cloud which seems to hang over him. He does not know what is the matter, but he never feels really fit, and his work is a weariness to him. This condition is very common, and, in a tedious, three years' commission at sea, the majority of ward-room officers will show some signs of it, in varying degrees, and for varying periods.

Now, exactly the same condition appears in the lower deck, but the effect on untrained minds is slightly different. When the afflicted man's mess-mates begin to chaff him, his life is made miserable by jests and gibes which he is unable to parry, as he can when in his normal condition. He becomes morbid and introspective, and is very apt to harbour delusions of mild persecutions on the part of his mess-mates. Since he feels generally out of sorts he makes an excuse to go to the ship's doctor. The slightest thing will serve as a pretext for this visit to the sick bay—a twisted ankle or a fall down a gangway, perhaps not wholly accidental.

The treatment is simple. The patient must be handled tactfully—given a day or so on the sick list, with some lotion for his afflicted part, and he will quickly become normal, and once more able to carry on his duty.

But should this man be handled without tact, should his mental condition be unrecognized, the result is quite different. Let the doctor call the patient a malingerer, or even allow his suspicions of a feigned injury to be apparent, and the man's mental condition becomes aggravated. He nurses a grievance against the doctor, and, in serious cases, would rather die than fail to prove he has been injured. He imagines himself a martyr, and, feeling that he has a just cause of complaint, becomes active rather than passive in his attitude. I have known a man so desperate from improper handling as to attack a medical officer or a commander who has accused him of being a shirker. He actually hopes for court-martial, as then he can pose as a great martyr.

On board the hospital ship ——— we had two or three cases of men who had been diagnosed as malingerers. Each of these cases, I believe, was saved from an acute mental condition by alteration of the diagnosis and by gentle handling. One, indeed, was found later to have early tuberculosis.

I might mention, in passing, that men suffering from an innocent varicocele seem especially liable to this condition. Sufficient emphasis is not laid on the connexion between varicocele and certain nervous derangements, which make a man an inefficient unit.

In view of all this, I believe I am justified in saying that a definite case of malingering, in which a man mentally or physically fit feigns illness in order to escape duty is very rarely met with. The point I wish to make is that the condition called malingering is one which is forced upon the patient by injudicious handling.

At a well-known naval hospital in England, the receiving porter once asked a newly entered naval surgeon the diagnosis of a certain case for entry in his discharge book. The surgeon answered "Malingering," to which the porter, looking up and down the page of his discharge book, replied, "But 'e can't have that, sir; there ain't no column for it!"

Reviews.

ALCOHOLISM.

The fifth edition of the work by Sir Victor Horsley and Dr. Mary Sturge[1] on the changes produced by alcohol in the human body has been enriched by chapters on the influence of drinking alcoholic beverages on the national health, written by Dr. Arthur Newsholme, on the effects of alcohol in tropical conditions, written in collaboration with Sir Leonard Rogers, and on the use of alcohol in the Naval and Military Services.

The authors have brought together much information concerning alcohol and its action on the human organism. They have collected the whole of the results accumulated by various investigators, and have subjected them to systematic analysis. They give a brief description of the chemical characters of alcohol, with some account of the process of fermentation and the preparation of alcoholic beverages. The next chapter is the most complete account extant in the English language of the pharmacological action of alcohol. Describing in the first place the action of the drug on unicellular organisms, they discuss its effects upon the more important physiological systems. They give some account of the effects of alcohol on the intact body, both of adults and of children, and deal specifically with the effect of parental alcoholism upon the development of

[1] Alcohol and the Human Body: An Introduction to the Study of the Subject, and a Contribution to National Health, by Sir Victor Horsley, F.R.S., F.R.C.S., M.B., B.S., Hon. M.D. Halle, etc., Major, R.A.M.C., and Mary D. Sturge, M.D., with a Chapter by Arthur Newsholme, C.B., M.D., F.R.C.P., D.P.H., and a Chapter written in collaboration with Sir Leonard Rogers, K.C.I.E., Lt.-Col., I.M.S., M.D., F.R.C.S., etc.; Fifth Edition; enlarged, 1915. London: Macmillan & Co.; Cr. 8vo., pp. 339. Price, 1s.

offspring and upon the race. Alcohol as an agent responsible for much acute and chronic disease receives their attention.

The authors must be congratulated on the simple, concise, yet accurate manner in which the alterations in the bodily functions induced by alcohol are described. While the greater part of the book will be readily understood by the educated layman, yet there is no chapter which cannot be read with interest and instruction by the medical practitioner and pharmacologist.

Special stress has been laid on the accumulative action of repeated small doses of alcohol. The authors believe that any dose of alcohol, even the smallest, has a marked effect on the more important tissues of the body. They are of opinion that earlier writers and investigators have not paid sufficient attention to these far-reaching effects of alcohol. The condemnation of alcohol by the authors is based on its alleged deleterious action on every organ, and in every dose. They hold that even the smallest amount of alcohol consumed as a beverage with food shortens the life of the consumer. While the statistics quoted favour this view, it must be remembered that the use of alcohol does not form the sole factor of difference between the groups.

Dealing with the use of alcohol by parents, the authors insist that the investigations that have been carried out have demonstrated the injurious effect on the offspring, even when quite small quantities have been taken. As the moderate drinker reads this chapter, he will be surprised to learn of the grievous harm that he has inflicted on his children. On the other hand, he may be reminded that total abstinence in Great Britain from the use of alcoholic liquors dates from the early decades of the nineteenth century. The centuries during which our ancestors partook daily of alcohol have left few traces upon our bodies. There seems no reason to suppose that the absence of alcohol from the diet of Arabs for over 1,000 years has given these Caucasians any marked superiority either physical or mental over British persons of the same Caucasian race.

It does seem as if the authors have not infrequently confused the effect of minute doses of alcohol with the effect of alcoholism. While small amounts of alcohol may produce slight changes in the animal organism, care must be taken not to regard the economic and social effects of the misuse of alcohol as the accumulated results of these slight changes. Alcoholism is probably the result of unstable mental conditions. The victim of alcoholism requires protection from the poison with which he destroys his body.

The authors may be congratulated on the way in which they have presented their conclusions. They hold decided opinions on the action of alcohol, yet the book is free from appeals to prejudices and passions. The book should be in the hands of every practitioner interested in knowing what evidence has been collected as to the effects of alcohol on man. It should also be placed in the library of every student of economics and social problems.

The following have been nominated for election to the New South Wales Branch:—

Dr. B. G. Wade, Wellington, New South Wales.
Dr. Carl Herman Seaforth, Brewarrina.
Dr. Hugh S. McLelland, Royal Prince Alfred Hospital.
Dr. Arnold L. Lance, Royal Alexander Hospital, Camperdown.
Dr. Frank Martindale Farrar, Bishopcourt, Randwick.

Dr. A. W. Campbell, of 183 Macquarie Street, has returned to Sydney to resume practice after fulfilling, according to the terms of his appointment, a year's service with the A.I.F. at the No. 2 Australian General Hospital.

THE HEALTH ACT, VICTORIA.

The following Proclamation has appeared in the Victoria Government *Gazette*, No. 4, of Wednesday, January 5, 1916:—

> I, the Governor of the State of Victoria, in the Commonwealth of Australia, do hereby declare that I have this day assented, in His Majesty's name, to the Bills passed by the Parliament of the said State, the titles whereof are hereinafter set forth, that is to say:—
>
> "An Act to amend the Health Act, 1915, and for other purposes."

INSANITY IN VICTORIA.

The Inspector-General of the Insane has issued his annual report for the year ending December 31, 1914. The report covers 62 pages, and includes a large number of tables and statistical information.

The ratio of the certified insane to the general population is 1: 247.2. On December 31, 1914, there were 5,827 registered lunatics in the State. This number is 91 more than the number at the end of 1913. In 1891 it was 3,868, and each year since that date it has increased, at times by 1 or 4, and at times by 150 to 166. During the year, 807 new patients were admitted. Of these, 713 were admitted for the first time to hospitals for the insane in Victoria. On January 1, 1914, 5,021 patients were in the hospitals, 472 were on trial leave, 138 were boarded out, making a total of 5,631 on the book. During the year, 52 patients escaped from detention, and only 39 were retaken. The total number under care for the year was 6,477. Of these, 696 died or were discharged. The actual number of deaths was 384, of recoveries was 220 and of improvement on discharge was 83. Nine patients were discharged "not improved." Of the 807 patients admitted, 155 had had one or more previous attacks of insanity. One attack had taken place previous to admission in 119 cases, two attacks in 22, three attacks in 7, four attacks in 3, five attacks in 2, and six and seven attacks in one each.

A table is set up to show the numbers of insane persons admitted and treated in the hospitals for the insane, in the private licensed houses and in the receiving houses and receiving wards. The private licensed houses were first recognized in 1905 and the receiving houses in 1907.

While the yearly number of admission varied between 654 and 858 during the past 24 years, the average number of patients in residence has increased from 3,623 to 5,046.

The recovery-rate is given at 27.26% for the year. The lowest rate recorded in the table is 22.07% in 1910, while the highest is 44.44% in 1899. The length of residence of the patients discharged under the heading of recovered and of those who died is given in a separate table. The maximum number of recoveries took place after between one and two years' residence. The number is 70. Only 10 patients recovered after one month's stay in hospital, while 17 recovered after a stay of between one and three months, 26 after a stay of between three and six months, 22 after a stay of between six and nine months, and 32 after a stay of between nine and twelve months. The frequency of recovery became less in the case of patients who were in hospital for periods of over two years. In one case a recovery is recorded in a patient who had been in hospital for a period of between 15 and 20 years, and the same is recorded of a patient who had been in hospital some time between 20 and 25 years.

The duration of mental disease in the cases ending fatally is far less regular. The greatest number of the patients again falls in the one to two years' group, but the numbers for the short periods, as well as for the long periods up to over 40 years vacillated between 8 and 29. The group of just under 12 months is represented by the figure 35.

The duration of the illness is dealt with in a further table. In this table a division of the patients into five classes has been arranged as follows: Class 1, first attack within three months of admission; Class 2, first attack over three months and within 12 months of admission; Class 3, not first attack, within 12 months of admission; Class 4, first or subsequent over 12 months before admission, and fifth class, congenital. Of the 807, the patients admitted during the year 351 belong to the first class, 112 to the second, 133 to the third, 114 to the fourth, 44 to the fifth, and in 53 it was unknown. Of the 220 patients discharged as recovered, 106 belonged to the first class, 13 to the second, 47 to the third, 21 to the fourth, 2 to the fifth, and in 31 instances it was unknown. There were 123 deaths out of 384 of patients belonging to the first class, 50 of those belonging to the second, 30 of those belonging to the third,

55 of those belonging to the fourth, and 30 of those belonging to the fifth. The duration of the disease was unknown in 96 cases.

Table 9 gives the ages of those admitted, recovered, relieved, not improved, escape not retaken and died during the year 1914, and of those remaining on the books at the end of the year. The greatest number of patients admitted were between 35 and 40 years of age, while the mean age of the patients sent to the hospitals for the insane was 41.56. The greatest number of those that died were between the ages of 50 and 55, while there were more patients of between 45 and 50 than any other age remaining in the hospitals at the end of the year. In eight instances the patients were between 90 and 95 years of age.

The probable causes of insanity in the patients admitted during the year are divided into moral and physical. Domestic trouble is entered as a cause 23 times, in 16 of which the patient was female. Adverse circumstances, on the other hand, is said to have caused insanity in 15 males and in 6 females. Mental anxiety, worry and overwork is entered against 15 males and 19 females, and religious excitement against 3 of each sex. The insanity in the case of 8 female patients is said to have been produced by love affairs (including seduction), and in 6 by fright and nervous shock. In one male fright and nervous shock is entered as the exciting cause.

Among the physical causes intemperance in drink caused insanity in 64 males and in 15 females. Sexual intemperance was the cause in two males and one female, and venereal disease in 66 males and 19 females. Sun-stroke acted as an exciting cause twice, and over exertion five times. Accident or injury produced insanity on 10 occasions, and was a predisposing cause once. The number of cases of insanity associated with pregnancy was one, and with parturition in the puerperal state was 11. Insanity of lactation occurred twice, while that of the menopause occurred 33 times. Old age is given as a predisposing cause 37 times, and as an exciting cause 49 times. Other bodily diseases or disorders as predisposing causes 9 times, and as exciting causes 65 times. Hereditary influences acted in 118 cases. Congenital defects predisposed the individual to insanity on 22 occasions, and caused it on 63.

The form of mental diseases is dealt with in a separate table. The most common form of mental disease under treatment was secondary or terminal dementia. Of the 5,729 patients remaining on the books at the end of the year, 1,822 were suffering from this form. The next in frequency was congenital or infantile mental deficiency of the intellectual variety, without epilepsy. This occurred in 568 patients. Primary dementia is entered 554 times, senile dementia 400 times, non-systematized delusional insanity 396 times, insanity with epilepsy 262 times, and systematized delusional insanity 207 times.

In regard to the occupation of the patient admitted during the year, it is shown that in 226 cases it was ordinary domestic work (servants, charwomen, laundresses), in 187 that of miners, labourers, seamen and shepherds, in 62 mechanical occupations, in 61 the patient had no occupation, in 42 the occupation was commercial, in 40 it was agricultural or pastoral, in 36 it was that of tradesmen employed in sedentary or indoor occupations, in 28 females employed in sedentary occupations, in 17 educational and higher domestic occupations, in 14 professional, and in 13 that of domestic service.

In regard to the causes of death, general paralysis of the insane heads the list with 59; 51 of the patients were males and 8 females. Cardiac diseases killed 51 persons. Atrophy, debility and old age is given as the cause of 49 deaths. Pneumonia, bronchitis and pleurisy accounted for 44 deaths, and pulmonary tuberculosis for 34. In 28 instances disease of the kidney, bladder and prostate was the cause of death; in 19 it was malignant disease, and in 15 some form of septic infection. Cerebral softening caused 8 deaths and epilepsy and convulsions 14.

It has already been stated that 952 patients were out on probation during the year. Of these, 149 recovered, including 52 of those allowed out during the year. A number of these patients were written off the books under Sections 94 and 100 of the Act of 1873. In addition, 23 of the patients died, and 197 returned to the hospitals for the insane at the expiration of the probation.

In the succeeding chapters, Dr. Ernest Jones deals specifically with the patients in the hospitals for the insane. He also details the work carried out in connexion with the examination of the nurses. The attendants and nurses are divided into three classes—junior, senior and special. In all, 96 attendants and 109 nurses presented themselves for examination. Of the former, 41 were junior, 48 were senior and 7 special, while of the latter 62 were junior, 39 senior and 8 special. The juniors and specials did not show a high pass standard, but the senior did very well. No less than 75% of the attendants and 53% of the nurses passed.

The report of the Chief Clerk and Accountant contains the usual figures connected with the maintenance and upkeep of the hospitals. The receipts derived from collections for maintenance of patients, sales, fines and miscellaneous collections amounted to £24,292, while the expenditure over-weighed this sum, being no less than £209,190. The total weekly cost of maintenance per patient worked out at 15s. 0¼d., while the average weekly collections for maintenance per patient amounted to 1s. 9¾d. The cost for general expenses assigned to each patient per week was 4¼d. In 1908 the average weekly cost per patient was 12s. 0¾d. This sum has increased steadily until the present figure has been reached.

A report from the medical superintendent of each of the State Hospitals for the Insane is appended. These reports contain much interesting and important information, but even a short summary of the data would occupy more space than is available. It may be noted that at Yarra Bend, only one patient was placed under restraint (by camisole); it has not been necessary to resort to restraint of any kind at Kew for a period of three years; five male patients in the Criminal and Refractory Ward at Ararat were restrained by camisole for violence for a total period of 93½ hours, and one female patient was dealt with in the same manner at this hospital for 60 hours. At Beechworth, five men and two women had to be restrained for self mutilation, destruction and suicidal furor, while one male and four females were placed in the camisole at Ballarat.

Dr. Lind's report from the Pathological Laboratory at Royal Park contains some general details, and the author deals with the subject of syphilitic lesions of the central nervous system, and with changes induced by alcohol, both of which subjects have been discussed by him in the pages of this journal.

Dr. Ernest Jones gives a brief summary of the more important provisions of an Act amending the Lunacy Act of 1873, which was introduced in 1914. The chief innovation was the recognition of voluntary boarders. A person desirous of obtaining admission to a hospital for treatment of a mental disorder may be admitted to a State Hospital, a receiving house or a private licensed house. The law assumes that the voluntary boarders are suffering from early or slight forms of mental disease, and that they are capable of recognizing the fact. The patient is required to sign a form undertaking to give three days' notice before leaving the institution where he is under treatment. This period of grace enables the medical superintendent to communicate with the patient's relatives if necessary. Dr. Ernest Jones feels justified from his experience up to the present in anticipating that the acceptance of the voluntary principle will facilitate an earlier recognition of mental disease, and consequently may lead to a more favourable result of treatment.

He points out that an Act has been passed in the State of Victoria, providing for the notification of cases of mental disorder caused by wounds received during the war, or by stress and disease arising from the same source. This has the object of preventing soldiers from suffering from the stigma of certification, at the same time as treatment may be instituted in the same manner as if they had been certified. He anticipates that this legislation will lead to the introduction of what is known as preliminary notification. He pleads for the removal of the anomaly of the Act which requires that any pathological research and post-mortem work carried out must be performed by others than the medical officers of the Department. He also speaks of the need for the establishment of psychiatric wards and clinics in the great metropolitan hospitals.

The Medical Journal of Australia.

SATURDAY, JANUARY 15, 1916.

The Economic Value of Science.

A few years ago the scientific side of medicine was regarded by the majority of the members of the medical profession as something entirely distinct from, and unessential to, the work of the practitioner. Many doctors were satisfied to deal with their patients without attempting to keep abreast with the times, and revealed impatience and intolerance when modern laboratory investigations and novel technical terms found their way into the medical journals. Little by little the practitioner has learned that there is an intimate connexion between the practice of medicine and the researches in the *post mortem* room, in the laboratory and in the hospital clinic. He has learned to recognize that by means of a sound knowledge of chemical, biological and physiological processes, he can grasp the affections which he is called upon to treat, and can be of greater use to the section of the community which is entrusted to his care. In the past, his methods were, at all events as far as he was concerned, empirical, and hence the greatest use of knowledge was not made. The same problem has gradually forced itself on those responsible for the industrial and commercial prosperity of the Empire. For centuries, the merchant had no use for University graduates, and did not listen to the theories of the worker in the laboratory. As medicine progressed into a scientific calling, and as chemistry and mineralogy disclosed valuable secrets, it became apparent that drugs, metals, dyes and analogous products could not be placed on the market economically unless the scientist was employed to adapt academic methods to commercial conditions. The practice of calling for assistance from the scientist spread slowly to other branches of commercial life, and incidentally the professional man became more and more concerned with the application of theoretical doctrines to practice. It is usually stated that the Germans recognized this economic value of science earlier and more widely than other nations. But it must not be forgotten that Pasteur supplied two invaluable contributions to industry at a time when the laboratory and the merchant's office stood very wide apart indeed. He prevented the extermination of the silkworm, and demonstrated the significance of yeast fermentation in the process of brewing. He thus proved up to the hilt that no commercial community could afford to neglect the laboratory scientist.

The doctrine that scientific methods are essential to commercial success is no longer challenged. In all great undertakings, be they agricultural, manufacturing or constructive, expert scientists occupy prominent positions, and considerable sums of money are expended on obtaining outside expert opinions before new methods are introduced. Success depends on the astuteness of the experts. It is true that in commercial life, financial success often follows the safeguarding of a monopoly, but, viewed from the broad prospect of nationalism, the trade, which adopts and perfects sound methods and applies scientific principles economically, does the greatest good. A few years ago, University graduates found a new and not unremunerative field of activity in the counting-house and office of the merchant. Bacon's precept that "Knowledge is power" was rediscovered.

The intimate association of the medical profession with applied science creates an interest on its part in the scheme of the Commonwealth Government for the establishment of an institution for the conduct of scientific research in its relation to industry. The conference held at Melbourne on January 5, 1916, illustrates the universal recognition of the principles enunciated above. The outcome of the discussion was a wise decision. An advisory council, consisting of Professors Sir Anderson Stuart, Sir Douglas Mawson, Masson and Gibson, and Messrs. Appleton, Delprat, Forwood, Grimwade, Higgins, Knox, Piddington, Robinson, Swinburne, and Wilkinson, is to formulate proposals for a national bureau of science and industry. If the proposals can be made to ensure that the whole community can be deeply impressed by the economic value of science, incalculable good will be done. The members of the conference realized that many of the

great Australian industries are piloted by men who have already recognized this principle. What is required is that the old, unscientific methods should be cast to the winds and replaced everywhere by modern, scientific ones.

ALCOHOL AND MILITARY EFFICIENCY.

Few subjects have caused more rancour and bitterness than the alcohol question. It is admitted that excessive indulgence in alcoholic beverages is responsible for more misery, crime and disease than anything else. In spite of this fact, agreement as to the best remedy has not been attained. The reason for the want of unanimity is to be sought in the confusion between alcoholism and the drinking of small quantities of alcoholic beverages. Viewed from an objective standpoint, it would appear that the same remedy could not be successfully applied for a mental affection characterized by an incapability of resisting the craving for alcohol, for the effects of isolated overdoses of alcohol and for the damage done by a continuous indulgence of quantities of alcohol, which do not produce any appreciable effect in single doses. Extremists claim that every drop of alcohol swallowed leaves its damaging effect on the organism. On the other hand, lax people attempt to persuade themselves that an occasional intoxicating dose does no permanent harm. The problem, as it affects us at present, is actually a simpler one than that which we have to face in time of peace. The facts are that all but the smallest quantities of alcohol impair the efficiency of the soldier, diminish his powers of resistance, both moral and bodily, and render him more liable to venereal infection. Secondly, drunkenness among the soldiers has been and still is common. It is beside the question for the moment to deal with any alcoholism that may exist. What is required is that the quantity of alcohol consumed by our fighting men should be reduced to a minimum. The obvious remedy would be to cut off all supplies, but this would be impracticable, even if it received consent. Not long ago, the Sanitary Committee of the No. 2 Military District submitted a report recommending various remedies to meet the situation. These included the establishment of wet canteens, in order that the drinking of soldiers might be under some control by the military authorities, that the drinks supplied might be selected, the stronger beverages being excluded, and that harmless entertainment might be associated with the canteens, so that the temptation to drink *pour passer le temps* might be eliminated. On January 4, 1916, the very strongest opposition to the continuation of wet canteens throughout the Commonwealth was voiced by the members of the Temperance Alliance at a meeting held in Melbourne. Representations were made to the Federal Parliamentary War Committee to the effect that the prohibition of "shouting" and earlier closing of public houses and drinking saloons should be adopted instead. It has now been announced that the Federal Parliamentary War Committee has recommended the continuation of wet canteens, the closure at 6 p.m. of hotels in the immediate vicinity of camps, and the closure of all hotels within proclaimed areas at the hour of 9 p.m. The Minister for Defence has stated that the first two recommendations have received the approval of the Cabinet, but that in the place of the third, the Minister should have power to make it an offence to serve soldiers with liquor after 9.30 p.m. While we sympathize with the Temperance Alliance, and would rejoice if the whole liquor traffic could be stopped for the duration of the war, we recognize that expediency must be considered before ideals, and that any measure which promises a practical result is to be preferred to a more efficient but less rational proposal.

ANTIMENINGOCOCCIC SERUM.

The members of the Melbourne University Council have had the opportunity of considering, on December 23, 1915, a report drawn up by Mr. Seddon, of the Veterinary School, on the arrangements for manufacturing antimeningococcic serum during the year 1916. It appears that the Defence Department is prepared to defray the expenses connected with the preparation of the antiserum. It is proposed to expend the sum of £300 on horse boxes, and a further sum of £750 on laboratory and institutional expenses in connexion with the preparation. The object in view is to obtain serum in a more active condition than that imported. Professor Sir Harry Allen defended the locally-prepared serum as compared with the imported sera, on the ground that the strains of meningococci used in other countries do not seem to be suited to the local conditions. He claimed that the serum obtained by the immunization of horses with a constant strain of diplococci have yielded satisfactory clinical results in Victoria.

Opinions are still divided in regard to the therapeutic value of antimeningococcic serum. Some authorities have interpreted their results in a manner favourable to serum, while others have concluded that the variations in the mortality from the disease are due to other factors. Under the existing circumstances there is no doubt that serum should be employed, and the wisdom of obtaining fresh serum, prepared by means of cultures derived from local cases, is unassailable.

THE AUSTRALIAN ARMY MEDICAL SERVICE.

In another column we record the promotion of Colonel Fetherston, Acting Director-General of Medical Services, to the rank of Surgeon-General. The congratulations of members of the medical profession, both civilian and military, are sincere and cordial, and the recognition that the honour is well placed is general. It is understood that he has returned to Australia with much information. This will form the subject of a report to the Minister for Defence. It has long been known that the organization in Egypt and in the Mediterranean was faulty, and that reforms in many directions were required. According to a correspondent to the *Argus*, of Melbourne, one of the first matters requiring immediate attention is the question of the chiefs of the medical service. We learn from other sources as well that the position of Director of Medical Services in Egypt has been offered to Surgeon-General Neville R. Howse, V.C., whose distinguished service has called for comment in these columns in the past. If this be so, there is little doubt but that the administration and management of affairs in Egypt will be satisfactory in future, and that some, if not all, of the defects of the past will disappear rapidly and completely. The medical profession will deprecate all attempts at fault-finding, and will be unwilling to lend an ear to hearsay and gossip. Serious work is ahead, and all will be concerned alone with the desire that this work may be satisfactorily accomplished. As Colonel Gordon Craig pointed out in his admirable letter published last week, we have every reason to be proud of the medical profession in Australia. If each man is prepared to do what he can for his country, our part of the Empire's great task will be well done, and a good example will be set to the other branches of the services. The task which Surgeon-General Fetherston has to complete should not be made difficult by useless incriminations and jealous backbitings. A united profession can assist him greatly.

The news of the death of Dr. William Odillo Maher reached Sydney on Sunday, January 9, 1916. Dr. Maher had been in Hobart for a short time, and unfortunately contracted pneumonia, from which he died after a few days' illness. We hope to publish an account of his career in next week's issue. His sudden death has come as a great shock to his numerous friends, and widespread sympathy is felt with his relatives.

Naval and Military.

The following appointments have appeared in the *Commonwealth of Australia Gazette*, No. 1, under date of January 6, 1916:—

Australian Military Forces.

Appointment.

His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of Colonel R. H. J. Fetherston, Director-General Medical Services (temporarily), being granted the temporary rank of Surgeon-General whilst holding such appointment, with pay at the rate of £850 per annum, inclusive of all allowances except travelling, as from 1st January, 1916.

3rd Military District.

Australian Army Medical Corps—

Captain (provisional) L. J. C. Mitchell is granted temporary rank and pay of Major, at rate prescribed by Universal Training Regulation 160, whilst holding appointment at No. 5 Australian General Hospital. Dated 1st December, 1915.

5th Military District.

Australian Army Medical Corps—

Frederick Augustus Hadley to be Officer Commanding No. 8 Australian General Hospital, and Staff Officer for Invalids, with temporary rank of Lieutenant-Colonel, and pay at rate of £547 per annum. Dated 4th August, 1915.

(This cancels the notification respecting this officer which appeared on page 2766 of *Commonwealth of Australia Gazette*, No. 133, of 28th October, 1915.)

Public Health.

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending January 1, 1916:—

Disease.	No. of Cases.
Diphtheria	36
Scarlet Fever	5
Enteric Fever	43
Pulmonary Tuberculosis	3
Varicella	2
Cerebro-Spinal Meningitis	2
Erysipelas	1
Total	92

THE HEALTH OF NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the eleven days ending December 31, 1915:—

	Metropolitan Combined Districts.		Hunter River Combined Districts.		Remainder of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Enteric Fever	21	3	4	1	22	5	47	9
Scarlatina	137	3	6	—	112	3	255	6
Diphtheria	72	5	6	—	121	4	199	9
Inf'ntile Paralysis	1	1	—	—	—	—	1	1
Meningitis	—	4	—	—	1	—	1	4
Pulm'y Tub'c'losis	32	7	—	—	—	—	32	7

Among the cases of diphtheria, 13 occurred at Broken Hill, 7 at Boree, 7 at Wilcannia, 6 at Inverell, 5 each at Bathurst, Berrigan, Cooma, Goulburn, and Orange, and 4 at Condobolin. The distribution of the scarlet fever cases was as follows: Lithgow 17, Armidale 15, Junee 6, and Narromine 6. Of the enteric fever cases, 4 were notified from Broken Hill.

SMALL-POX IN NEW SOUTH WALES.

The following cases of small-pox have been reported to the Department of Public Health, New South Wales, during the week ending January 9, 1915:—

	Cases.
Sydney (infected from Newcastle)	1
Country—	
Taree	2
Newcastle	3
Total	6

Abstracts from Current Medical Literature.

MEDICINE.

(18) Schistosomiasis Japonica.

A. C. Reed gives a full account of the disease variously known as *schistosomiasis japonica*, Yang-tze fever, river fever and Katayama disease (*Amer. Journ. Tropic. Dis. and Prevent. Dis.*, November, 1915). It is caused by a trematode worm, *Schistosomum japonicum*, in the portal vein and its radicles, and is characterized by an acute febrile course, and under certain conditions a chronic course, with symptoms of portal obstruction, splenomegaly, progressive anæmia, and intermittent diarrhœa. It tends to terminate fatally in from one to three years. The disease was first described in 1887 by Majima. It occurs in various provinces in China in the basin of the Yang-tze river, in parts of Japan, and in the Philippine Islands; one or two cases have been observed in Europe and America. The male parasite averages 8 to 18 mm. in length, according to the nature of the host and the environment. It is slender in its anterior fifth, and is wider and thicker at the posterior part. The sides are prolonged as lateral flaps, which are rolled together over the ventral surface, forming a *canalis gynaecophorus*. The mouth sucker measures from 0.5 to 0.6 mm. across. At the after end of the anterior narrow section there is a second ventral sucker. The colour is a dirty white or reddish, and the cuticle is well differentiated. The sexual apparatus consists of seven longitudinal elliptical testicles. The ducts from each testicle unite in a common duct, which opens behind the ventral sucker. The female is nearly cylindrical, with tapering extremities. It varies in length from 18 to 26 mm. The ovarium is situated just behind the centre of the body, and is oval or elliptic. The oviduct commences at the posterior extremity, and ends in the uterus. The yolk secreting gland consists of acini, and discharges its secretion into the oviduct. The worm resembles the bilharzia in its anatomical structure. The ova show much variation in shell and content. When passed out of the uterus, the shell is thin, and the contents a clear thick fluid with a nucleus and several yolk cells. It does not contain miracidia at this stage. In the interstinal canal of the host the eggs break and mature eggs containing miracidia escape into the stool in relatively large quantities. The infectious forms are free-swimming larvæ, which penetrate the skin of a new host. Some Japanese observers have suggested that a snail acts as the intermediary host. The parasite occurs in man, cattle, dogs and cats. In dealing with the pathology of the affection, the author points out that the ova are more in evidence than the adult worms, and that they tend to lodge in the terminals of the portal vein, and are frequently carried to distant parts of the body, where they lodge as emboli. This leads to secondary lesions. The damage done to its mammalian host falls under three heads: (*i.*) The effect on the blood and other tissues locally from the actual presence of the worms. (*ii.*) The results of embolic distribution of eggs. (*iii.*) The results in the blood and other tissues of toxin production by the parasite. He describes the effect on the liver, spleen, intestines, nervous system and urinary system. The chief changes in the blood are eosinophilia and secondary anæmia. The stools contain blood, mucus and ova. There is intermittent diarrhœa. No ova are found in the urine. Infection of mammals occurs only through penetration of the skin. The incubation period is usually about 10 to 15 days, but may be shorter. The first stage of illness is acute, and is not associated with grave lesions. It lasts from three to six weeks, and the symptoms are malaise, headache, and evening fever. An urticarial rash appears after two or three days. The fever terminates by lysis. In the second stage, eosinophilia, enlargement of the liver and spleen, and attacks of diarrhœa occur. Mental and psychical depression develope, and there is marked cachexia. This stage may last up to five years. The third stage is characterized by the progress of grave organic lesions. Emaciation, ascites and anasarca, as well as changes in the gastro-intestinal and cardio-renal system, are seen. He deals with the diagnosis, prognosis, prophylaxis and treatment. In regard to the last named, he points out that no drug appears to do any good.

(19) Raynaud's Disease.

A. L. Hoyne (*Journ. Amer. Med. Assoc.*, November 13, 1915) discusses the nature of Raynaud's disease, and records a case of unusual severity. According to Raynaud, there are three stages or degrees: (1) local syncope of brief duration, with a tendency to recurrence, (2) local asphyxia, and (3) symmetrical gangrene. Local syncope is accompanied by a sensation of burning or tingling, and there may be extreme pain. This type is practically identical with the condition frequently found in chilblains, and may be present in what is described as "dead fingers." Local asphyxia is also painful. The skin is reddish purple, and may become a bluish-black. The author regards the third stage of symmetrical gangrene as essential for the diagnosis of Raynaud's disease, and on this basis he finds that the condition is a very rare one. At the Cook Country Hospital, where about 30,000 patients received treatment annually, only three cases had been diagnosed in the past four years. In a period of 20 years there were only 19 cases at the Johns Hopkins Hospital. In regard to ætiology, heredity is said to play a part in about 8% of the cases. Fright, epilepsy and neurotic conditions are said to be predisposing causes, while anæmia, syphilis, tuberculosis and malaria are frequently associated with it. Very little is known of the pathology. The author's patient was a boy of five years of age, of Polish descent. The child was admitted to hospital for scarlet fever. On the eighth day it developed a rash of morbilli. Double otitis media was evident on the twenty-first day. Right parotitis was noted on the twenty-sixth day, but it was doubtful whether this was an attack of mumps. On the thirty-fourth day an eruption of varicella appeared, and on the following day the diagnosis of pertussis was made. On the forty-sixth day after admission large patches of blue-black colour appeared on the dorsum of the feet, near the base of the toes. Small patches appeared on the back of the right wrist, and an area of discoloration on the right cheek. The coagulation time of the blood was about seven minutes. In the evening the areas had extended; the skin above the cyanotic areas in all four extremities were swollen, tense and waxy, and very painful. The affected parts were icy cold. On the following day both ears became affected, and the lower extremities became gangrenous. On the third day lines of demarkation became established. On the fifth day the boy managed to remove the dressings and chewed off the tip of the right ring finger. There was no bleeding. On the sixth and seventh days the gangrenous portions assumed the appearance of dried boot leather. On the ninth day the right ear fell off, and on the tenth the left ear. A clean margin was left in each instance. On the eleventh day all the gangrenous parts were becoming detached. A broncho-pneumonia developed on the twelfth day, and terminated fatally on the fourteenth. The post mortem findings included thrombosis of the right femoral vein, bilateral confluent pneumonia of the lower lobes and discrete broncho-pneumonia of both upper lobes, acute hyperplasia of the peribronchial lymph glands, perilobular infiltration of the liver, fatty degeneration of the kidneys and general lymphadenoid hyperplasia.

(20) Diphtheria.

J. F. Hanly (*Canada Lancet*, August, 1915) discusses the dissemination, prevention and cure of diphtheria. He points out that although droplet infection may take place at times, direct contact is essential under ordinary circumstances. The infection may be spread through objects as well as individuals, and, as is well known, unrecognized and concealed cases are the most dangerous. According to Arkwright, about one-half of diphtheria patients are free from the bacillus two or three days after the membrane has disappeared. About 75% of the total number are free from infection a week or ten days after the membrane has separated. Antiseptic gargles, sprays and swabs, antitoxin and vaccination do not always clear the bacilli from the throats in chronic carriers. Vaccination gives the best result. In regard to the prophylaxis, the patient should be isolated in a light, well

warmed and ventilated room; all excreta and discharges should be disinfected or burned, and contacts should receive an injection of antitoxin, and be placed in quarantine for ten days to a fortnight. Hewlett has prepared an endotoxin which gives good results in clearing the throats of the bacillus, but as it contains toxin it must be used with care. In immunizing with antitoxin, the dose should probably be repeated after ten days. In speaking of the dose of antitoxin for curative purposes, he points out that marked differences exist in various parts of the world. In Boston, mild cases are given from 6,000 to 10,000 units, repeated if necessary, while severe cases receive up to 400,000. Koplik does not exceed 20,000 units, while Whyte, of Toronto, gives up to 40,000. The author considers that 10,000 units for a child and 20,000 for an adult should suffice as a rule, and that over 25,000 for a child or 50,000 for an adult is probably unnecessary and useless. Goodall is of opinion that in severe cases anti-toxin should be given, despite the risk of anaphylactic shock.

NEUROLOGY.

(21) Legislation for the Insane.

F. E. Williams gives an account of the historical development of the legislation for the care of the insane in Massachusetts (*Boston Medical and Surgical Journal*, November 11, 1915). In 1641 the Body of Liberties provided that "children, idiots, distracted persons and all that are strangers or new commers to our plantation shall have such allowance and dispensations in any cause whether criminall or other, as religion and reason require." The Colonial Law of the same date provided that "any conveyance or Alienation of land or other estate what so ever, made by any woman that is married, any children under age, idiot or distracted person, shall be good if it be passed and ratified by the consent of the General Court." The first law of the State providing for the care of the insane was passed in 1797. This took the form of an amendment of an Act of 1788 dealing with the suppression of rogues, vagabonds, common beggars, and other idle, disorderly and lewd persons. In the amendment the words "lunatic persons" were added. In 1816 a new law was passed, providing that any person acquitted of crime because of insanity might be committed to gaol by any justice of the Supreme Judicial Court until he recovered. In 1818 the McLean Hospital for the Insane was opened. At this period insanity was considered to be incurable, and the hospital was planned for humanitarian rather than for medical purposes. Admission to the hospital, however, was free, on the application either of the patient or his friends or relatives. A few years later the opinion that insanity in its early stages was easily curable became very prevalent. As a result of this movement, the Worcester Lunatic Hospital was built and opened in 1833. Up to this time a patient could be committed to the hospital by order of any two Justices of the Peace or of a Judge of the Supreme Court. In 1833 an Act was passed requiring Judges to commit persons "so furiously mad as to render it manifestly dangerous to the peace and safety of the community that such lunatics should continue at large." The Judge was not called upon to decide whether the person was sane or insane, but he had to determine whether he was "so furiously mad" as to be a danger to the community. In 1834 a new provision was added, requiring persons making application to give notice beforehand. In 1837 trial by jury was provided for. The suggestion emanated from Dr. Samuel Woodward, the first Superintendent of the Worcester Hospital. In 1839 a law was passed providing for a municipal hospital for Boston, and the power of commitment was lodged with the Municipal Court. In the following year this power was transferred to the Police Court. No changes in regard to procedure were made until 1853. The author deals at some length with the wave of enthusiasm which attended the new idea that insanity was freely curable. He quotes various authors and statistics of the time to show that recovery was supposed to take place in from 75% to 90% of cases. It was proved, however, that the statistics were grossly misleading. In one hospital a woman was reported to have recovered nine times in two years, and in a New York hospital 46 times during her life. The patient was said to have died upon her fifty-ninth admission. The practice in asylums became completely altered. As the conception that insanity was a moral defect gave place to the doctrine that it was a pathological condition of the brain, so the treatment changed from restriction to moral suasion. The public, however, soon became distrustful in regard to results, more especially because the superintendents were autocratic, and visits were frequently restricted. In 1862 the law was changed to provide for the detention of insane persons who, in the opinion of the Justices, were proper subjects for treatment and custody. Certificates and evidence of two reputable medical practitioners were required to establish the fact of insanity. In 1865 Dr. Bemis reported that the laws regarding the certification of the insane had operated unfavourably on the admission of patients. In 1863 a commission was appointed to enquire into the whole question. The commissioners found that the care of the Massachusetts Hospital for the Insane was in honest hands, and should be trusted. They recommended a commission in lunacy, license for private hospitals, requirement for the detention of any person alleged insane, certification by two practitioners, and abolition of commitment by judges, save in criminal cases. Private hospitals were licensed in the following year. During the following decade, distrust increased, and reached its acme about 1879, when psychiology and pathology were making marked headway. In the 'eighties, constructive legislation began. In dealing with the temporary care of the insane, the author points out that six different Acts were introduced for this purpose. Four of these laws provide for care without the necessity of court action. In discussing these laws, he emphasizes the point that the medical man trained to note physical and pathological aspects of mental problems was more capable of determining the diagnosis of insanity than a member of the legal profession. He states that a judge who would hesitate to diagnose a case of heart disease, exhibited no hesitancy in making a diagnosis of mental disease. The voluntary admission law provides that any person, desiring admission to a hospital for the insane, may be admitted on his own application, provided he understands the nature of his act. No voluntary patient may be detained longer than three days after that patient has given notice in writing that he desires to be discharged. The Boston police law provides that the police should bring all persons to the Psychopathic Hospital who, when brought under arrest, appear to be suffering from mental disorder. At first these persons were detained for the purposes of diagnosis for seven days, but this period has subsequently been extended to ten days. The author suggests that a longer period might be provided. He appends various statistical evidence of the value of the voluntary and temporary care laws.

(22) Astereognosis of the Left Hand.

W. Harris and E. G. Fearnsides record a case of astereognosis of the left hand in a nurse aged 31 (*Proc. Royal Soc. Med.*, Neur. Section, June, 1915). In November, 1914, the patient noticed that she became easily tired. In January, 1915, she complained of a dull ache in the shoulders and axillæ, and down the inner side of the upper arm, forearm, wrists and hands. The arms gradually lost power. About March, 1915, the left hand became numb. The patient became unable to use the hand for ordinary purposes. Her general health was good. She experienced great difficulty in bringing the fingers of her left hand into alignment; the two ulnar fingers tended to drop away, and had to be brought back into place. The left hand could be dorsiflexed to a greater degree than the right, and the muscles of the left forearm showed some hypotonia. The left right finger could be dorsi-flexed to a greater extent than any other of the fingers. The tone of the muscles of the legs was normal. The left hand was cooler and moister than the right, and the nails were said to grow less rapidly. Both knee jerks were exaggerated, and the ankle jerks were brisk. With the eyes closed she was unable to recognize objects placed in her left hand. There was gross loss of power of appreciating passive movements of the fingers and wrist on the left side. Sensation to cold and heat was normal, and no sensory interference to the cotton wool test was noted.

Medical Matters in Parliament.

WESTERN AUSTRALIA.

(*Continued from page* 43).

The Health Act Amendment Bill was received from the Assembly on September 14, 1915, and read a first time in the Legislative Council.

The Hon. J. M. Drew, Colonial Secretary, moved the second reading of the Bill in the Legislative Council on September 16, 1915. He said that the Bill was important since it dealt with the existence of an evil that had been allowed to proceed unthwarted since the foundation of the State, and which had grown to such proportions as to call for serious thought on the part of the Legislature to discover the best means to prevent it making inroads upon the people of the State. He gave extensive statistics to show the prevalence of these diseases in Commonwealth and the State. He quoted the opinion of Dr. McMurray on the need for increased facilities in hospitals for the treatment of these diseases, for the establishment of wards which would be attractive and not labelled with distinctive and opprobious names, and for the foundation of municipal dispensaries in convenient centres, which should be open all night. The most important clause dealt with the power of the Commissioner to authorize an examination of a suspected person. He urged members not to allow the small risk of abuse under this clause to lead them to refrain from taking action to overcome the terrible scourge in their midst. In committee, he would move amendments to exempt registered pharmacists from the effects of section 242a when they sold any drug, not being a proprietary or patent medicine, in the ordinary course of their business, and not as a cure for venereal disease, to permit the Commissioner to send a letter to any person, requiring that person to consult a medical practitioner, and to produce a certificate that such person is under treatment or is not suffering from venereal disease. He would also move an amendment allowing a female person to be examined by a female doctor, and a new clause, that all notices should be served by an officer of health.

On the motion of the Hon. C. Sommers the debate was adjourned.

The debate was resumed on September 22, 1915.

The Hon. A. J. H. Saw welcomed the Bill, because he approved of the principle of safeguarding the health of the people from venereal disease. As the measure came to them it was so full of flaws and so greatly imperilled the liberty of the innocent person that he wondered it had been passed in the form presented to them by another place. If ever a Bill justified the existence of another chamber this was the Bill. The Bill suspended the Habeas Corpus Act for the person suffering from venereal disease. A person might contract venereal disease and yet, under the measure as it was presented to them, that person might, at the whim of the Commissioner and the Governor-in-Council, acting on the advice of the Commissioner, be detained for years, and no power could get the patient out as long as the disease remained infective. They knew that one of these diseases lasted for years, and no one could say when it was cured. No power on earth, no order of a judge and no right of appeal could get a person so infected from detention. The only way would be to organize a revolution and storm the modern Bastille. This might be a considerable condemnation of the Bill, but he welcomed it, because he approved of the principles underlying it. He welcomed it, because it was paved with good intentions. He would vote for the second reading, although he intended to move many amendments in committee. Having sketched the history of their knowledge of syphilis, Dr. Saw stated that his serious attention was directed to the prevalence of syphilis by the paper of the President of the Inter-State Medical Congress, Sir Harry Allen, in 1908. The Professor had stated that he had found evidence of syphilis in the bodies of 30 persons out of 100 on whom he had made post-mortem examinations. Sir Harry Allen had recorded the results of 100 consecutive post-mortem examinations chosen at random during his year's work. He had been compelled to hold that in the hospital population, syphilis was widespread, a frequent cause of death, a potent factor of physical deterioration and a contributing agent to an increased mortality from other diseases. He had thought that these results were exceptional, but his subsequent observations had forced him to believe that they represented the actual conditions of affairs. He combated the belief that gonorrhœa was a trifling disorder. It could lead to serious complications. Turning from these general considerations to the provisions of the Bill, he stated that the Hon. Minister, Mr. Underwood, prided himself in the fact that the measure was not the outcome of the labours of the Commissioner of Public Health, Dr. Hope. If this impression was correct, he thought that it was a pity. He made bold to say that if Dr. Hope had drafted the Bill they would have had a better measure, one free from crude provisions. He was of opinion that some of the clauses were too stringent. Severe penalties were provided, no matter how innocent the infringement of the clause might be. In regard to compulsory examinations, he thought that the Commissioner should only take action on a sworn declaration, and that the accused person should have the right to see that declaration, and that the accused person should be supplied with a verified copy of the declaration. He would remind them of the Lion's mouth in the Doge's palace at Venice. In mediæval times, accusations were placed in it, and, on these, many acts of tyranny were based. He asked whether it was intended to have a Lion's mouth in the wall of the office of the Commissioner of Public Health. It was said that the religious convert was bigoted and intolerant, but he thought that no sooner did the advocate of freedom assume Ministerial responsibility than he wished to become an autocrat. He was strongly opposed to the administration of this Act being placed in the hands of the police. He desired to warn the Minister that if any good was to result from the Bill the bacteriological staff of the Public Health Department must be kept at a high level. The day of the naked-eye diagnosis of the disease, followed by handing a bottle of medicine to the patient, was passed.

In the treatment of the disease they would need frequent bacteriological examinations. This was a matter that those in charge of the department did not realize sufficiently. Owing to this failure to apply scientific knowledge, persons infected with this disease were enabled to obtain clean bills of health, and allowed to go among the public spreading the disease wholesale. Another weak place in the Bill lay in the bacteriological examinations to be made by the Department of Public Health. These could be done for a hospital free of charge, but when a medical practitioner invoked such aid, and he might say that it was absolutely necessary to do so, since the ordinary surgeon or physician had not the knowledge of bacteriology necessary to enable him to carry out these investigations, they were charged fees ranging from seven shillings to two guineas. He admitted that the examinations were laborious. He intended to move an amendment that these investigations be carried out free of charge by the Department of Public Health. There was noticeable in the Bill an attempt to treat the medical profession unjustly. All kinds of requirements were exacted from the medical practitioner. For instance, there were notifications to be made, and one of these notifications was almost absurd. A patient under treatment was supposed to come back within four weeks, but if he failed to come back within six weeks the practitioner must notify the authorities of the omission or suffer a penalty. A medical man did not have his mind centred on one patient, and yet if he failed to notice that a single patient had failed to return in six weeks he was to pay a penalty of £50. He thought this penalty was ridiculous. It was the same penalty to be exacted from the man who wilfully inflicted venereal disease on his fellow. Further, if a salaried man refused to treat free of charge a wealthy patient of high social status his salary was to be reduced by the amount due to him in that financial year. Despite these defects he thought the Bill to be a good one.

The Hon. C. Sommers deplored the haste with which Bills of great importance were forced through Parliament. A Bill was passed before most persons were aware of its provisions. He hoped steps would be taken to isolate those suffering from certain diseases.

The Hon. A. Sanderson said that much disease was prevalent in the military camps. He asked whether the State

authorities would be able to deal with the venereal disease among soldiers in Western Australia. He thought that these matters should be under the control of the Commonwealth.

The Hon. Sir E. H. Wittenoon supported the Bill. He believed in the compulsory clauses. A certain amount of compulsion was necessary. It had been free and optional long enough for people to choose whether they would be cured or not. He thought that the Commissioner would use the clause with a due sense of responsibility.

On the motion of the Hon. W. Patrick the debate was adjourned.

The Hon. W. Patrick resumed the debate on September 29, 1915. He combated the idea that this disease was increasing. The available evidence in the official documents entirely disproved the statement that this disease was increasing. Since 1896 the death-rate had fallen to one-half, while the infant mortality had fallen from 177 per 1000 in 1896 to 68 per 1000 in 1914. Of 507 deaths only 5 were ascribed to syphilis. In other words, only 1% of the deaths of infants was entered as due to syphilis. He thought that the figures given by Professor Allen related to a special class in the community. Again, Dr. Montgomerie's figures applied to the insane. They must remember that there was only one insane person among every 300 persons. In the Commonwealth Year-book records were give of 52,217 deaths, and of these 184 were ascribed to syphilis. If this disease was so common, he asked why people were able to lodge in hotels and travel in trains and trams and not contract the disease. Dr. Hope had said that, if the question of temperance could be solved, syphilis would largely disappear, and tuberculosis diminish. If that were so they had only to close the hotels and the problem was solved. If they studied other countries they would find that abstemious nations were often licentious. He trusted that he had shown that there was no special necessity for the measure. There was no need to call this Bill a Health Bill. It was a Contagious Diseases Act. He was opposed to the compulsory clauses. They could be applied to women but not to men. He would quote the wise words of the Archbishop of Perth: "Under this Bill as it stands at present no woman will be safe from persecution and blackmail. The police will have in their hands power which no one dreams of giving them. I ask any parent how they would like it if one of their daughters was reported, and had to submit to examination. The indignity would be dreadful. There would be no redress. To put this power into the hands of the police, no matter what members of Parliament say to the contrary, is to my mind a terrible evil." He would oppose the second reading.

The Hon. J. J. Holmes supported compulsory notification and compulsory treatment. He was opposed to the proposed amendment by Dr. Saw that the Commissioner should only take action on a statutory declaration. No persons would act as informers if they found that their names were given to the persons against whom they informed. They might modify the Act so that the name of the informant would be given when the suspected person was found free upon examination. The aggrieved person could then take action if blackmail or vindictiveness had actuated the informer. He was of opinion that the severity of the disease demanded the most drastic steps for its suppression.

The Hon. C. F. Baxter had been waiting to hear the arguments in favour of the compulsory clauses. One of these arguments was that the disease was rampant among the returned soldiers. He thought that the Federal authorities would not allow them to deal with the soldiers suffering from this disease. The power to be given to the Commissioner to order the examination of any female was an outrage on common sense and decency. He thought that the Act would press hardly on the unfortunate class. It would also press harshly on the poor. He wondered how many doctors would report a rich and influential patient. He was afraid that unscrupulous men would squeeze the last penny from many an unfortunate victim. He thought that more could be accomplished by education and the multiplication of places for the free treatment of the disease.

The Hon. J. F. Cullen would support the Bill. He wished to point out that the Act was a health measure, and would not be administered by the police. It was said that the disease was widespread, yet it was proposed that every salaried medical man should treat any case coming to him without extra fee. He intended to vote for the elimination of the compulsory examination clause in Committee. He thought that the forcible examination of a woman against her will was utterly repugnant to the community. As soon as women started to resist the examination, and were injured in the process the whole community would rise in rebellion. He thought that the State could do much more in the way of prevention. He would ask them to consider the lavatories on trains and the sanitary accommodation.

On the motion of the Hon. F. Connor the debate was adjourned.

The Hon. F. Connor resumed the debate on September 29, 1915. He was opposed to the compulsory clauses as they stood. If the Bill passed the second reading he proposed to move a clause that any person failing to establish an information given by him to the Commissioner as to another person suffering from venereal disease shall be guilty of an offence against the Act. Penalty £50, or imprisonment with hard labour for six months.

The Hon. W. Kingsmill would vote for the second reading in the hope that the Bill would be radically amended in Committee. He felt sure the Bill would add materially as a paving of the streets in that city of dreadful night that Dr. Saw had seen. He would like to know where the Bill came from. It seemed to him that the most drastic clauses had been taken from many Bills, and concentrated in this Bill. There were in the Bill provisions, which he presumed were to be exercised, under which the ordinary citizen and his wife were liable to have happenings introduced into their lives, the like of which they had not thought of before. Again, it was possible to visualize Western Australia as the modern Venice. Another aspect of the measure was that it provided no redress for wrongful apprehension, wrongful examination, and wrongful detention. There was a tendency on the part of sufferers from the diseases alluded to in the Bill to adopt a policy of concealment. He felt that the drastic nature of the measure would send the sufferers from this disease into the darkest corners. If that was so it would do more harm than good.

The Hon. J. Cornell considered that the provisions might be somewhat crude, but he agreed that they could be altered in Committee. He also agreed with Dr Saw that the Bill should be administered by persons attached to the local Boards of Health, or to the Health Department. He was of opinion that all bacteriological tests should be made free, not only in this regard but also in all respects. There should be a sufficient number of bacteriological and scientific instruments available. Science moved from the pivot of scientific discoveries. They had gone from the stage of moving step by step until they reached the scientific stage. Scientific discoveries rendered mankind great service. Often the only reward was the goodwill of posterity. From scientific discoveries the medical man worked.

On the motion of the Hon. A. G. Jenkins the debate was adjourned.

The Hon. A. G. Jenkins resumed the debate on October 5, 1915. He made an impassioned defence of the Bill. He thought that an amendment was necessary to provide that all information should be confidential, and that the publication of names, except such as were necessary in the course of duty, should be punished with a severe penalty. An amendment was required that all proceedings under certain sections should be heard in camera, and that no newspapers should be allowed to publish any of the proceedings, and the default should be punished with a severe penalty.

The debate was then adjourned.

The Hon. H. Millington resumed the debate on October 13, 1915. He said that the Bill was the outcome of a close study and careful analysis of various measures in the form of legal enactments, of the records of their results, of the findings of committees of experts, and with special regard to the opinions of medical authorities and sociological students. It appeared that all medical men had come to the opinion that only the most drastic proposals could cope with this dread disease. He had the report of the special committee of the tenth session of the Australasian Medical Congress, held at Auckland in February, 1914. This report had been used by the Honorary Minister in

framing the measure. The report advocated the passage of legislation providing for (*a*) the detention of any persons suffering from venereal disease until they were rendered innocuous by treatment; (*b*) the severe punishment of those who wilfully or negligently communicated venereal diseases to other persons; and (*c*) the severe punishment of anyone other than a medical practitioner who undertook to treat sufferers from venereal disease. If the steps indicated were taken with wisdom the committee thought the results would be diminution of mortality, diminution of insanity, diminution in the expenditure on hospitals and asylums, and increased human efficiency, with better and healthier enjoyment of life.

When the Colonial Secretary had replied the question was put and passed.

The Bill was read a second time.

(To be Continued.)

Medico-Legal.

TWO NEW ZEALAND CASES.

Mr. Justice Cooper and a special jury tried an action for damages in respect of injuries alleged to have been caused by negligence on the part of the doctor in administering Röntgen rays on December 2 and 3, 1915, at the Supreme Court, Auckland. The plaintiff, Mrs. Sara Sissons Montague, claimed £640 damages. She was represented by Mr. J. R. Reed, K.C., and Mr. R. A. Singer. Dr. H. C. Bamford and Mr. R. W. McConnell appeared for the defendant, Dr. Arthur Clark.

In his opening statement, Mr. Reed stated that Mrs. Montague visited Dr. Clark in April, 1914, on account of a rash on her right hand. The condition was cheiropompholyx. Dr. Clark treated it with X-rays. A week later he exposed the whole hand to the action of the rays. On May 5 the hand had the appearance of being boiled or fried. It broke out in blisters, and Mrs. Montague suffered intense pain. On May 22 the whole hand was suppurating. The defendant was unable to find anything to relieve the pain. The plaintiff consulted Dr. Milsom as well as other doctors. In May, 1915, the hand looked as if it was getting well, but when the cold weather came, the affection broke out again. As a last resort she went to Sydney, and consulted doctors there, but without effect. So far amputation had not been necessary, but she had been advised that two fingers would have to be amputated eventually. Mr. Reed contended that considering the nature of the skin affection, the first act of negligence was the application of X-rays. The defendant had also been negligent in not warning the plaintiff of some of the dangers associated with the use of X-rays, and finally he contended that it was an act of negligence that caused the fingers to be burned. The subsequent treatment of the injury was careless and negligent.

Dr. Milsom gave evidence for the plaintiff. When he saw the hand there were marked signs of burning with X-rays. He treated it with picric acid, and considerable improvement resulted, but when cold weather came the affection broke out again. He considered that the only means of obtaining complete relief would be amputation of the fingers. He would have tried lotions and medicines before applying X-rays.

Dr. Neil McDougall, a radiologist, stated that the condition was incurable, and that amputation would ultimately be necessary. In reply to Dr. Bamford, witness admitted that even if the greatest care were taken, it was inevitable on occasions that serious damage would be done by X-rays.

Dr. H. D. McKenzie regarded cheiropompholyx as a trivial complaint, and one for which he would not have employed Röntgen rays.

Dr. Bamford, for the defence, maintained that the defendant's diagnosis and treatment were correct; that the plaintiff had been warned that a small risk was incurred; that defendant had taken every precaution in manipulating his apparatus; and that the unfortunate results were lamentable accidents which might befall the most careful physicians.

Dr. Arthur Clark gave evidence to the effect that it was a proper method of treating cheiropompholyx with X-rays. He told plaintiff that there was a remote risk, but she had laughed, and said that she was willing to accept it. He admitted that the hand had been burned by X-rays. These accidents were due to a peculiarity of constitution which rendered some people very susceptible to the influence of X-rays. He had examined Mrs. Montague's hand during the past few days, and his opinion was that the prospect of recovery was quite good. In reply to Mr. Reed, Dr. Clark disagreed with the evidence given by the medical witnesses for the plaintiff. He had applied X-rays ten times to the plaintiff's hand. He did not apply other forms of treatment because the condition was very intractible.

Dr. Leatham, radiologist of the New Plymouth Hospital, said that Dr. Clark's dosage was a safe one for ordinary individuals. It was impossible to know beforehand when the patient would be peculiarly susceptible to the rays. Every radiologist lived in anxiety of encountering a case of this kind. He had seen the plaintiff's hand, and had noted the ulceration. Had he not known the history he could not have said what the ulceration had been caused by. If care were taken he did not think that it would be necessary to amputate the hand.

In the cross-examination he dealt with the conditions under which X-rays burns occurred. He also stated that there was no certain means of measuring the doses.

The plaintiff was recalled, and denied that ten applications were made. She had had the treatment twice on the right and twice on the left hand.

Dr. Bamford addressed the jury at some length, emphasizing the points in the defence. He maintained that the evidence showed that Dr. Clark was correct in his diagnosis, and that he had exercised due care and skill in the application of X-rays. In regard to the number of applications, he contended that the doctor's records were more trustworthy than the plaintiff's memory.

Mr. Reed submitted that had any peculiar susceptibility existed the effect would have been the same on the left hand as on the right.

After his Honour had summed up, the jury returned a verdict for Dr. Clark, with costs on the higher scale.

The second case was one in which a doctor claimed the sum of £58 2s. 6d. in respect of fees for medical attendance, and the patient counter-claimed the sum of £45 11s. expenses alleged to have been incurred through the plaintiff's negligence. The plaintiff was Dr. Gordon Macdonald, and was represented by Mr. W. C. MacGregor, while the defendant was a Mr. George Farquhar. Mr. J. Callan appeared for the defendant. The case was heard in the Magistrate's Court, Dunedin, on November 23, 1915.

It appears that the defendant's son met with an accident to his leg, and applied to the plaintiff for treatment at the Châlet Hospital. The doctor diagnosed the condition as periostitis, and performed an operation with the object of evacuating the pus from a periosteal abscess. A small shell of bone was removed. The wound did not heal, as expected, and several months later a second abscess had to be opened. No bone was removed on this occasion. Later the patient returned to the hospital with an extension of the trouble. The lower part of the wound was suppurating. Bare bone was felt on probing the wound. Dr. Macdonald considered the question of exploring the tibia, but hesitated in subjecting the patient to an extensive operation on account of his general condition. After a time an operation was performed, and about three inches of the anterior surface of the tibia were removed, the medullary canal being opened. The boy improved after this operation, but later on further trouble ensued, which plaintiff regarded as referable to the constitutional state of the patient, and not to the local infection.

About the end of May, 1915, the defendant asked Dr. Hunter to examine her son. He came to the conclusion that the boy was suffering from an acute osteomyelitis, and advised free removal of all the affected bone. The wound was cleaned up for a few days, and then the sinus was opened up, and about 12 inches of the shaft of the tibia were removed. The bone was soft and full of pus. In the posterior part there was a large sequestrum,

Dr. Hunter refused when under examination to reply to any questions dealing with the scientific capabilities of the plaintiff. Several medical witnesses expressed the opinion that Dr. Macdonald's treatment was correct.

In the end the magistrate gave judgement to Dr. Macdonald for the amount claimed, with £5 18s. costs, and found for the plaintiff claim on the counter-claim, with £5 14s. costs.

KALYRA SANATORIUM, BELAIR.

The John Brown Memorial Trust controls a Sanatorium at Belair, in South Australia, and a home for the aged, blind and crippled, called Estcourt House, near the Semaphore. The annual report of these institutions for the year 1914-1915 has been issued, and contains some interesting information. In regard to the stability of the two institutions, it is pointed out that the iron hand of war has made inroads on the money available, and that the trustees are extremely anxious to receive aid from the charitable public, in order to obviate the necessity of trenching on the reserves, which yield a not inconsiderable part of the resources. The year ended with a deficiency of over £350, while the total sum expended was only £4,700. This deficiency represents approximately 7% of the outgoings. The Government contributed £909 out of a total income of £4,370, and the local Board of Health contributed £350, making a total of £1,459, or about 33% of the total. In view of the importance of the undertaking and the difficulties which the trustees have to contend, perhaps the Government might increase the subsidy to £1,000, in addition to the fees for patients in excess of ten.

The report of the Medical Superintendent, Dr. J. Walter Browne, of the Kalyra Sanatorium, is deserving of notice. There were 38 patients passed on from the previous year. The fresh admissions numbered 118, while at the end of the year 28 patients were still under treatment. It therefore appears that in 128 patients the treatment was completed. No deaths took place; in 19 of the patients the disease was said to have been arrested; an improvement was registered in 69, and 40 remained unimproved. Until several years have elapsed and the ultimate results of the treatment can be ascertained, it is advisable to regard the arrested and the improved as degrees of immediate benefit of institutional treatment. Of the 48 patients with disease in the first stage, 16 are tabulated under "arrest," and 28 under "improved." The average residence of the patients worked out at 103.8 days. The number of patients in the second stage was 54. Of these, the disease was said to have been arrested in 3 and the condition improved in 34, and the average stay in the Sanatorium was 110.5 days. There were 26 patients in the third stage. Of these, 7 were improved after an average residence of 89.7 days. It thus appears that the immediate result of the treatment was satisfactory in about one-third of the patients in the first stage, and favourable in a little over a half; satisfactory in one-eighteenth in the second stage, and favourable in under two-thirds; while of those in the third stage, none were satisfactorily influenced by the treatment, and only in a little more than a quarter of the cases was the influence favourable. It is by no means a bad result to restore the full power of working to 14.85% of all the patients after about 3½ months' treatment. In order that the true value of the treatmnet may be assessed, it would be necessary to know the type of symptoms of those patients who were markedly improved, or as recorded in whom the disease was "arrested." A disposition to make the results appear as favourable as possible is disclosed by the table dealing with the patients discharged during the previous eleven years. Instead of marking the number of persons still alive in periods of five years, the Medical Superintendent is satisfied to recite the apparent condition at the time of discharge. The treatment adopted appears to have consisted in rest and graduated exercise in the open air, inhalations and drugs when required, and in five cases artificial pneumothorax. No record is included as to whether tuberculin was used. The diagnosis was confirmed by the discovery of the tubercle bacillus in the sputum in 104 cases. "The intradermal injection of tuberculin for diagnostic purposes was occasionally used," Some information of the condition of the patients is gleaned from the table of frequency of hæmorrhage. It appears that this symptom occurred in 57 patients, either before admission or during the stay in the sanatorium. In 23 of the patients hæmorrhage was the first symptom of disease. The majority of the patients were admitted within six months of the apparent onset of the disease. The Superintendent is very sanguine when he states that if treatment could be instituted "sufficiently early, it was highly probable that nearly all cases of consumption could be cured." The word "sufficiently" is elastic, and we venture to question the correctness of this view, if it is meant to convey the meaning that the greater number of patients subjected to treatment in an institution within the first three months of the first manifestation of tuberculosis of the lungs would be found to be free from all traces of disease after a lapse of five or ten years. Perhaps we may learn of the fate of the 1,194 patients who have been in the Sanatorium in next year's report.

Correspondence.

WHITE AUSTRALIA POLICY.

Sir,—The Administrator has again challenged the intelligence of the community in his report on the Northern Territory, published in November, 1915. Therein he confesses his administration has failed in its purpose; but he lacks either the ability or the candour to determine its cause. His own contribution is a chapter of lamentations, but the interest centres chiefly in the last paragraph:—

> "While progress has been disappointing to me as to others, in the vital direction of settling people of European origin permanently in the Territory, it must not be forgotten that no other purely tropical State has yet attempted this. I have found no evidence that any number of white people are desirous of making the necessary effort to settle permanently, and, of course, our race cannot be pitchforked in and forced to remain willy-nilly. The consensus of private opinion in Australia, as elsewhere, seems to me to be against the possibility of development by whites, although public opinion is distinctly in favour of no other development. It is always the other man—with wife and family—who is to be the pioneer; and he is slow in forthcoming. In this connexion, the action of the Lighthouse Department, which proposes to remove its men to the south during the summer months because of the climate, referred to by the Government Secretary, is instructive, but not encouraging. Personally, I am still of the opinion that the climate offers no bar to the proper development by white labour. In certain quarters it has been stated that two or three generations will be required to demonstrate the truth or otherwise of such a contention; but, if no attempts be made voluntarily, it is difficult to conceive how the proof will ever be obtained. What can be asserted now is that, given freedom from tropical and other infectious diseases by importation, the evidence available is that the Territory is quite as healthy for white people as any other part of the world. Indeed, it is probably the only part of the continent where men may be seen at any time and all times of the year engaged in hard, physical labour in the open air, undressed from the waist upwards but for an ordinary felt head-covering. The fear of sunstroke does not exist, and its occurrence in such circumstances appears unknown in the Territory."

It will be noted that the quotation is made up of ten statements, each exciting comment; and so they will be taken *seriatim*:—

(1) While the "others" may be disappointed, why the Administrator? He set himself an impossible task, and has demonstrated to Australians the futility of their policy. No doubt they will be content with their experiment, but they have the right to expect from an Administrator, claiming scientific authority, that he will possess the knowledge and the insight to determine accurately the cause of the failure, or else he has failed indeed. The Administrator prides

himself that no other purely tropical state has made the same attempt. Perhaps the Americans, with some reason, would suggest the Panama.

(2) "I have found no evidence." Here the Administrator expresses the common experience throughout the tropics; no white people go to the tropics but to exploit and leave them, except tourists, missionaries and solitary individuals in search of health.

(3) The confliction of private and public opinion is a remarkable admission. Is it to be understood that the one is honest, the result of personal experience and knowledge, while the other, as advocated by representatives of Government and Press, is not honest, and is the price of place, power and pay?

(4) "It is always the other man." Why not be candid and admit that there is no hope for the white unskilled worker? He has tried and failed. It is only the Panama experience over again.

(5) The action of the Lighthouse Department "is instructive." In what way? It certainly has not made much impression on the Administrator, and had his long lament ended here, no exception could have been taken to his report. His mission had failed, and he admitted it, but he now assumes scientific authority and goes on to state that:

(*a*) He is of the same opinion still.
(*b*) Some say it will take three generations to demonstrate it.
(*c*) The Territory is quite healthy.
(*d*) It is where one can work in the sun all the year round without clothes.
(*e*) There is no fear of sunstroke.

Such inanities coming from an ex-professor of veterinary science compels one to question his intelligence or doubt his sincerity.

(6) After all his years of experience and his admissions, the Administrator is of the opinion that climate offers no bar to white labour. Surely this must be his public opinion!

(7) He deplores the lack of patriotic spirit to make a demonstration. The trouble is not the lack of proof, for that is abundant, but how are you going to make the blind see? Let Dr. Gilruth, Dr. Pern and the disappointed "others" start cotton ranches, or, better still, become agricultural labourers at the current rate of pay of £4 per week. It can be safely asserted that if the matter is left to the decision of their wives and families it will not take three generations to prove the stupidity "of such a contention."

(8) Why does the Administrator take credit for the healthy conditions of the Territory? Was it ever seriously disputed? Did it ever offer an impediment to settlement?

(9) Does the Administrator really think that to advertise the fact that the Territory is the one portion of the continent where men work in the sun all the year round without clothes will induce any European to break up his home and settle there?

(10) "The fear of sunstroke does not exist." Then, why do they wear "ordinary felt head-covering"? "Sunstroke is unknown in the Territory." Then it must be that their heads are effectively protected by hats or pigment. Dr. Gilruth ignores the physical properties of pigment.

Yours, etc.,

"M.B. (Melb.)."

December 29, 1915.

Diary for the Month.

Jan. 15.—Northern Suburbs Medical Association, N.S.W.
Jan. 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee, Ethics Committee.
Jan. 19.—West Aust. Branch, B.M.A., General.
Jan. 19.—Northern District Medical Association, N.S.W., Armidale.
Jan. 21.—Central Southern Medical Association, Goulburn.
Jan. 21.—Queensland Branch, B.M.A., Council.
Jan. 21.—N.S.W. Branch, Eastern Suburbs Med. Assoc., Annual Meeting.
Jan. 25.—N.S.W. Branch, B.M.A., Medical Politics Committee, Organization and Science Committee.
Jan. 26.—Vic. Branch, B.M.A., Council.
Feb. 2.—Vic. Branch, B.M.A., General.
Feb. 4.—Queensland Branch, B.M.A., General.
Feb. 10.—Vic. Branch, B.M.A., Council.
Feb. 11.—S. Aust. Branch, B.M.A., Council.

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Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. Croydon Hospital.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
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